A reconstruction of Peters's auxiliary tables to his ten-place logarithms (1919)

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1 The work of Johann Theodor Peters

Johann Theodor Peters (1869–1941) was a German astronomer and computer of mathematical and astronomical tables. In 1910 and 1911, together with Julius Bauschinger, he published the first widely available 8-place table of logarithms [15]. This work was the basis of many later tables, most of which have been reconstructed by us.[1]

The 8-place table was itself based on a 12-place manuscript table, which was again used by Peters in the preparation of a new 7-place table of logarithms of trigonometrical functions for every second of the quadrant published in 1911 [36].

2 Peters's auxiliary tables to 10-place logarithms (1919)

This is an auxiliary volume to Peters's 10-place tables of logarithms published in 1919 (volume 2) [42] and 1922 (volume 1) [45]. These three volumes were reprinted in 1957 [96].

The auxiliary volume contains two main tables (corrections to the first differences and tables of the functions S and T, described and reconstructed below), as well as several useful conversion tables:

- conversion between arc lengths (radians) and sexagesimal degrees;
- conversion between minutes and seconds of arcs and fractions of degrees;
- conversion between measures of time and degrees, with 24 hours corresponding to 360 degrees;
- conversion between the old (sexagesimal) and new (centesimal) divisions of the circle;

These conversion tables have not (yet) been reconstructed.

The original volume of auxiliary tables published in 1957 ends with four pages of errata for volumes 1 and 2.

2.1 Corrections to the first differences

The first table in this volume gives corrections to be applied to the first differences in the table of logarithms of trigonometric functions [42] published the same year and which this volume is accompanying. As stressed by Peters in the introduction to his tables, the first differences show great variations and they have to be taken into account for the interpolations.

In his main table [42], Peters gives several examples, of which we consider the following one. Assume that $\log\sin 3°.17523814$ is sought. In the table, we find $\log\sin 3°.175 = 8.7433988073$, located between differences 1366672 and 1366241, with -431 as the value

[1] For more information on Peters's tables, we refer the reader to our summary [90].

of the second difference. Interpolating with second differences, we have therefore

$$\log\sin 3^\circ.17523814 - \log\sin 3^\circ.175$$
$$\approx \left[0.23814 \times 1366241 + \frac{0.23814 \times (0.23814 - 1)}{2} \times -431\right] \times 10^{-10} \tag{1}$$
$$\approx 0.23814 \times \left[1366241 + \frac{1 - 0.23814}{2} \times 431\right] \times 10^{-10} \tag{2}$$

Peters's auxiliary table, reconstructed here, gives the value of the expression $\frac{1-0.23814}{2} \times 431$ as a function of the phase (0.23814) and of the absolute value of the second difference (431). In the auxiliary table, for 430 and 0.24, we find 163, which when added to 1366241 yields 1366404.

Eventually, $\log\sin 3^\circ.17523814$ is approximated by $8.7433988073 + 0.23814 \times 1366404 \cdot 10^{-10} = 8.7434313468$ which is only off by one unit of the last place.

Instead, using only first differences, $8.7433988073 + 0.23814 \times 1366241 \cdot 10^{-10}$ would have yielded 8.7434313430 which is off by 39 units.

Since the second differences in the 10-place trigonometric table do not exceed 1000, Peters's auxiliary table has an entry for second differences from 0 to 1000, by steps of 10.

The corrections to the first differences are rounded as follows. If the phase is $0 \leq p \leq 1$ and the second difference is d, the exact correction is $c = \frac{1-p}{2} \times d$ and Peters used the following rounding:

$$c = \lfloor \frac{1 - p}{2} \times d + 0.4999999\ldots \rfloor$$

that is, he rounded half integers to the integer part, and not to the next integer.

In the first volume published in 1922, Peters suggests another procedure where interpolation with first differences are done first, and the results are then corrected with the terms depending on second differences. The details are given in our description of that volume [88].

2.2 Tables of the functions S and T

The second table of this volume gives the auxiliary functions S and T to 10 places from $0^\circ.000$ to $2^\circ.100$, together with the (tabulated) first differences. We have

$$S(\alpha) = \log\sin\alpha - \log A + 10 \tag{3}$$
$$T(\alpha) = \log\tan\alpha - \log A + 10 \tag{4}$$

where A is the angle α expressed in degrees.

These functions are useful to interpolate accurate values of $\log\sin$ and $\log\tan$ when the angles are near 0. In volume 2, these functions are only tabulated until $0^\circ.300$.

These two tables were supposedly obtained using Briggs's table [17], but Briggs gives the logarithms of tangents only to ten places, and it is not totally clear how Peters actually proceeded. The logarithms of sines, on the contrary, are given to 14 places, and the values of S could have been interpolated.

We remind the reader that the definitions of S and T may be different in other tables. In Bauschinger and Peters's table of logarithms [15], for instance, A is the angle in sexagesimal seconds, and we have therefore an offset of $\log 3600$ compared to the values found here.

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	200	210	220	230	240	250	260	270	280	290	300
0.00	100	105	110	115	120	125	130	135	140	145	150
01	99	104	109	114	119	124	129	134	139	144	148
02	98	103	108	113	118	122	127	132	137	142	147
03	97	102	107	112	116	121	126	131	136	141	145
04	96	101	106	110	115	120	125	130	134	139	144
05	95	100	104	109	114	119	123	128	133	138	142
06	94	99	103	108	113	117	122	127	132	136	141
07	93	98	102	107	112	116	121	126	130	135	139
08	92	97	101	106	110	115	120	124	129	133	138
09	91	96	100	105	109	114	118	123	127	132	136
0.10	90	94	99	103	108	112	117	121	126	130	135
11	89	93	98	102	107	111	116	120	125	129	133
12	88	92	97	101	106	110	114	119	123	128	132
13	87	91	96	100	104	109	113	117	122	126	130
14	86	90	95	99	103	107	112	116	120	125	129
15	85	89	93	98	102	106	110	115	119	123	127
16	84	88	92	97	101	105	109	113	118	122	126
17	83	87	91	95	100	104	108	112	116	120	124
18	82	86	90	94	98	102	107	111	115	119	123
19	81	85	89	93	97	101	105	109	113	117	121
0.20	80	84	88	92	96	100	104	108	112	116	120
21	79	83	87	91	95	99	103	107	111	115	118
22	78	82	86	90	94	97	101	105	109	113	117
23	77	81	85	89	92	96	100	104	108	112	115
24	76	80	84	87	91	95	99	103	106	110	114
25	75	79	82	86	90	94	97	101	105	109	112
26	74	78	81	85	89	92	96	100	104	107	111
27	73	77	80	84	88	91	95	99	102	106	109
28	72	76	79	83	86	90	94	97	101	104	108
29	71	75	78	82	85	89	92	96	99	103	106
0.30	70	73	77	80	84	87	91	94	98	101	105
31	69	72	76	79	83	86	90	93	97	100	103
32	68	71	75	78	82	85	88	92	95	99	102
33	67	70	74	77	80	84	87	90	94	97	100
34	66	69	73	76	79	82	86	89	92	96	99
35	65	68	71	75	78	81	84	88	91	94	97
36	64	67	70	74	77	80	83	86	90	93	96
37	63	66	69	72	76	79	82	85	88	91	94
38	62	65	68	71	74	77	81	84	87	90	93
39	61	64	67	70	73	76	79	82	85	88	91
0.40	60	63	66	69	72	75	78	81	84	87	90
41	59	62	65	68	71	74	77	80	83	86	88
42	58	61	64	67	70	72	75	78	81	84	87
43	57	60	63	66	68	71	74	77	80	83	85
44	56	59	62	64	67	70	73	76	78	81	84
45	55	58	60	63	66	69	71	74	77	80	82
46	54	57	59	62	65	67	70	73	76	78	81
47	53	56	58	61	64	66	69	72	74	77	79
48	52	55	57	60	62	65	68	70	73	75	78
49	51	54	56	59	61	64	66	69	71	74	76
0.50	50	52	55	57	60	62	65	67	70	72	75

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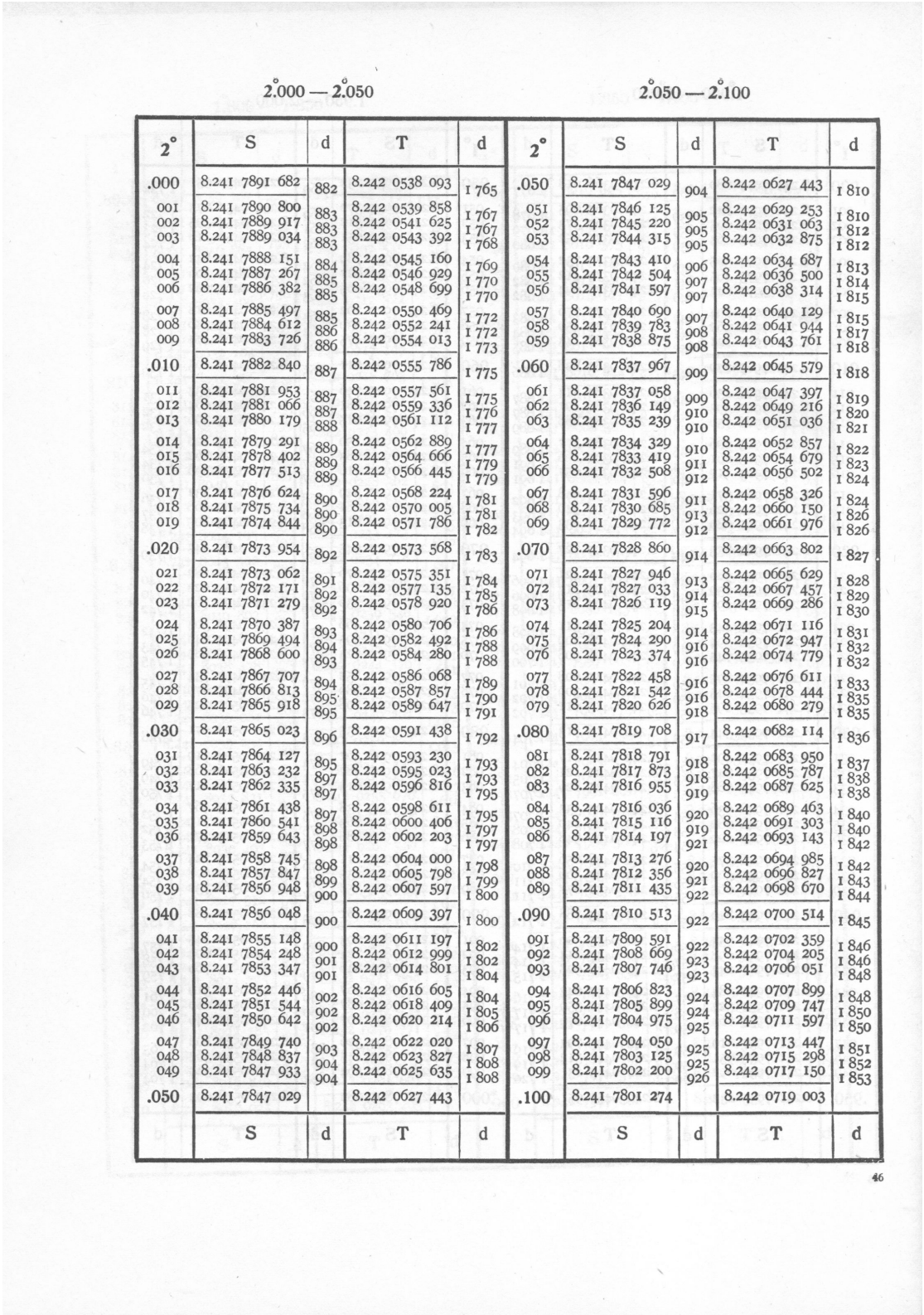
Figure 1: Excerpt of Peters's table (1957 edition).



2°.000 — 2°.050

2°	S	d	T	d
.000	8.241 7891 682	882	8.242 0538 093	1 765
001	8.241 7890 800	883	8.242 0539 858	1 767
002	8.241 7889 917	883	8.242 0541 625	1 767
003	8.241 7889 034	883	8.242 0543 392	1 768
004	8.241 7888 151	884	8.242 0545 160	1 769
005	8.241 7887 267	885	8.242 0546 929	1 770
006	8.241 7886 382	885	8.242 0548 699	1 770
007	8.241 7885 497	885	8.242 0550 469	1 772
008	8.241 7884 612	886	8.242 0552 241	1 772
009	8.241 7883 726	886	8.242 0554 013	1 773
.010	8.241 7882 840	887	8.242 0555 786	1 775
011	8.241 7881 953	887	8.242 0557 561	1 775
012	8.241 7881 066	887	8.242 0559 336	1 776
013	8.241 7880 179	888	8.242 0561 112	1 777
014	8.241 7879 291	889	8.242 0562 889	1 777
015	8.241 7878 402	889	8.242 0564 666	1 779
016	8.241 7877 513	889	8.242 0566 445	1 779
017	8.241 7876 624	890	8.242 0568 224	1 781
018	8.241 7875 734	890	8.242 0570 005	1 781
019	8.241 7874 844	890	8.242 0571 786	1 782
.020	8.241 7873 954	892	8.242 0573 568	1 783
021	8.241 7873 062	891	8.242 0575 351	1 784
022	8.241 7872 171	892	8.242 0577 135	1 785
023	8.241 7871 279	892	8.242 0578 920	1 786
024	8.241 7870 387	893	8.242 0580 706	1 786
025	8.241 7869 494	894	8.242 0582 492	1 788
026	8.241 7868 600	893	8.242 0584 280	1 788
027	8.241 7867 707	894	8.242 0586 068	1 789
028	8.241 7866 813	895	8.242 0587 857	1 790
029	8.241 7865 918	895	8.242 0589 647	1 791
.030	8.241 7865 023	896	8.242 0591 438	1 792
031	8.241 7864 127	895	8.242 0593 230	1 793
032	8.241 7863 232	897	8.242 0595 023	1 793
033	8.241 7862 335	897	8.242 0596 816	1 795
034	8.241 7861 438	897	8.242 0598 611	1 795
035	8.241 7860 541	898	8.242 0600 406	1 797
036	8.241 7859 643	898	8.242 0602 203	1 797
037	8.241 7858 745	898	8.242 0604 000	1 798
038	8.241 7857 847	899	8.242 0605 798	1 799
039	8.241 7856 948	900	8.242 0607 597	1 800
.040	8.241 7856 048	900	8.242 0609 397	1 800
041	8.241 7855 148	900	8.242 0611 197	1 802
042	8.241 7854 248	901	8.242 0612 999	1 802
043	8.241 7853 347	901	8.242 0614 801	1 804
044	8.241 7852 446	902	8.242 0616 605	1 804
045	8.241 7851 544	902	8.242 0618 409	1 805
046	8.241 7850 642	902	8.242 0620 214	1 806
047	8.241 7849 740	903	8.242 0622 020	1 807
048	8.241 7848 837	904	8.242 0623 827	1 808
049	8.241 7847 933	904	8.242 0625 635	1 808
.050	8.241 7847 029		8.242 0627 443	
	S	d	T	d

2°.050 — 2°.100

2°	S	d	T	d
.050	8.241 7847 029	904	8.242 0627 443	1 810
051	8.241 7846 125	905	8.242 0629 253	1 810
052	8.241 7845 220	905	8.242 0631 063	1 812
053	8.241 7844 315	905	8.242 0632 875	1 812
054	8.241 7843 410	906	8.242 0634 687	1 813
055	8.241 7842 504	907	8.242 0636 500	1 814
056	8.241 7841 597	907	8.242 0638 314	1 815
057	8.241 7840 690	907	8.242 0640 129	1 815
058	8.241 7839 783	908	8.242 0641 944	1 817
059	8.241 7838 875	908	8.242 0643 761	1 818
.060	8.241 7837 967	909	8.242 0645 579	1 818
061	8.241 7837 058	909	8.242 0647 397	1 819
062	8.241 7836 149	910	8.242 0649 216	1 820
063	8.241 7835 239	910	8.242 0651 036	1 821
064	8.241 7834 329	910	8.242 0652 857	1 822
065	8.241 7833 419	911	8.242 0654 679	1 823
066	8.241 7832 508	912	8.242 0656 502	1 824
067	8.241 7831 596	911	8.242 0658 326	1 824
068	8.241 7830 685	913	8.242 0660 150	1 826
069	8.241 7829 772	912	8.242 0661 976	1 826
.070	8.241 7828 860	914	8.242 0663 802	1 827
071	8.241 7827 946	913	8.242 0665 629	1 828
072	8.241 7827 033	914	8.242 0667 457	1 829
073	8.241 7826 119	915	8.242 0669 286	1 830
074	8.241 7825 204	914	8.242 0671 116	1 831
075	8.241 7824 290	916	8.242 0672 947	1 832
076	8.241 7823 374	916	8.242 0674 779	1 832
077	8.241 7822 458	916	8.242 0676 611	1 833
078	8.241 7821 542	916	8.242 0678 444	1 835
079	8.241 7820 626	918	8.242 0680 279	1 835
.080	8.241 7819 708	917	8.242 0682 114	1 836
081	8.241 7818 791	918	8.242 0683 950	1 837
082	8.241 7817 873	918	8.242 0685 787	1 838
083	8.241 7816 955	919	8.242 0687 625	1 838
084	8.241 7816 036	920	8.242 0689 463	1 840
085	8.241 7815 116	919	8.242 0691 303	1 840
086	8.241 7814 197	921	8.242 0693 143	1 842
087	8.241 7813 276	920	8.242 0694 985	1 842
088	8.241 7812 356	921	8.242 0696 827	1 843
089	8.241 7811 435	922	8.242 0698 670	1 844
.090	8.241 7810 513	922	8.242 0700 514	1 845
091	8.241 7809 591	922	8.242 0702 359	1 846
092	8.241 7808 669	923	8.242 0704 205	1 846
093	8.241 7807 746	923	8.242 0706 051	1 848
094	8.241 7806 823	924	8.242 0707 899	1 848
095	8.241 7805 899	924	8.242 0709 747	1 850
096	8.241 7804 975	925	8.242 0711 597	1 850
097	8.241 7804 050	925	8.242 0713 447	1 851
098	8.241 7803 125	925	8.242 0715 298	1 852
099	8.241 7802 200	926	8.242 0717 150	1 853
.100	8.241 7801 274		8.242 0719 003	
	S	d	T	d

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Figure 2: Excerpt of Peters's table (1957 edition).

References

The following list covers the most important references[2] related to Peters's table. Not all items of this list are mentioned in the text, and the sources which have not been seen are marked so. We have added notes about the contents of the articles in certain cases.

[1] ???? On the eight-figure table of Peters and Comrie. *Mathematical Tables and other Aids to Computation*, 1(2):64–65, 1943. [The title is ours, and there are actually two notices, on the accuracy of the table published in 1939 [55], and its comparison with other tables.]

[2] Marie Henri Andoyer. *Nouvelles tables trigonométriques fondamentales contenant les logarithmes des lignes trigonométriques....* Paris: Librairie A. Hermann et fils, 1911. [Reconstruction by D. Roegel in 2010 [65].]

[3] Marie Henri Andoyer. *Nouvelles tables trigonométriques fondamentales contenant les valeurs naturelles des lignes trigonométriques....* Paris: Librairie A. Hermann et fils, 1915–1918. [3 volumes, reconstruction by D. Roegel in 2010 [66].]

[4] Raymond Clare Archibald. J. T. Peters, Achtstellige Tafel der trigonometrischen Funktionen für jede Sexagesimalsekunde des Quadranten. *Mathematical Tables and other Aids to Computation*, 1(1):11–12, 1943. [review of the edition published in 1939 [55]]

[5] Raymond Clare Archibald. J. T. Peters, Seven-place values of trigonometric functions for every thousandth of a degree. *Mathematical Tables and other Aids to Computation*, 1(1):12–13, 1943. [review of the edition published in 1942 [40]]

[6] Raymond Clare Archibald. Tables of trigonometric functions in non-sexagesimal arguments. *Mathematical Tables and other Aids to Computation*, 1(2):33–44, 1943.

[7] Raymond Clare Archibald. J. T. Peters, Eight-place table of trigonometric functions for every sexagesimal second of the quadrant. Achtstellige Tafel der trigonometrischen Funktionen für jede Sexagesimalsekunde des Quadranten. *Mathematical Tables and other Aids to Computation*, 1:147–148, 1944. [review of the edition published in 1939 [55]]

[8] Raymond Clare Archibald. J. T. Peters, Siebenstellige Logarithmentafel. *Mathematical Tables and other Aids to Computation*, 1:143–146, 1944. [review of the edition published in 1940 [56]]

[2] **Note on the titles of the works:** Original titles come with many idiosyncrasies and features (line splitting, size, fonts, etc.) which can often not be reproduced in a list of references. It has therefore seemed pointless to capitalize works according to conventions which not only have no relation with the original work, but also do not restore the title entirely. In the following list of references, most title words (except in German) will therefore be left uncapitalized. The names of the authors have also been homogenized and initials expanded, as much as possible.

The reader should keep in mind that this list is not meant as a facsimile of the original works. The original style information could no doubt have been added as a note, but we have not done it here.

[9] Raymond Clare Archibald. Johann Theodor Peters. *Mathematical Tables and other Aids to Computation*, 1(5):168–169, 1944. [obituary notice]

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[11] Raymond Clare Archibald. J. T. Peters, Siebenstellige Werte der trigonometrischen Funktionen von Tausendstel zu Tausendstel des Neugrades. *Mathematical Tables and other Aids to Computation*, 2(19):299, 1947. [review of the 1941 edition [57]]

[12] Raymond Clare Archibald. *Mathematical table makers. Portraits, paintings, busts, monument. Bio-bibliographical notes.* New York: Scripta Mathematica, 1948. [contains a photograph of Peters]

[13] Julius Bauschinger. Interpolation. In Wilhelm Franz Meyer, editor, *Encyklopädie der mathematischen Wissenschaften mit Einschluss ihrer Anwendungen*, volume 1(2), pages 799–820. Leipzig: B. G. Teubner, 1904. [a French translation appeared in [93]]

[14] Julius Bauschinger and Johann Theodor Peters. *Logarithmic-trigonometrical tables with eight decimal places etc.* Leipzig: Wilhelm Engelmann, 1910–1911. [2 volumes, English introduction. See [15] for the German edition.]

[15] Julius Bauschinger and Johann Theodor Peters. *Logarithmisch-trigonometrische Tafeln mit acht Dezimalstellen etc.* Leipzig: Wilhelm Engelmann, 1910–1911. [2 volumes, German introduction. See [14] for the English edition; these volumes have been reprinted in 1936, 1958 and 1970, but the introductions vary. In particular, details of the construction of Hamann's machine were dropped in the last editions. Reconstructions are given in [70] and [71].]

[16] Henry Briggs. *Arithmetica logarithmica.* London: William Jones, 1624. [The tables were reconstructed by D. Roegel in 2010. [68]]

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[21] Leslie John Comrie. J. T. Peters, Sechsstellige Tafel der trigonometrischen Funktionen,. . . , Berlin, 1929. *Mathematical Tables and other Aids to Computation*, 1(5):162, 1944. [Attributes errors in the first edition of [46] to one of the proofreaders of the table.]

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[23] Alan Fletcher, Jeffery Charles Percy Miller, and Louis Rosenhead. *An index of mathematical tables.* London: Scientific computing service limited, 1946.

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[33] A. V. Lebedev and R. M. Fedorova. *A guide to mathematical tables.* Oxford: Pergamon Press, 1960.

[34] Johann Theodor Peters. *Neue Rechentafeln für Multiplikation und Division mit allen ein- bis vierstelligen Zahlen.* Berlin: G. Reimer, 1909. [also published in 1919 and 1924 by Walter de Gruyter & Co.; the library of the Paris observatory also has a variant of the 1909 edition with the French title "Nouvelles tables de calcul pour la multiplication et la division de tous les nombres de un à quatre chiffres" (as well as a French introduction), which the library kindly checked for us; and the 1924 edition seems to be an English one with the title

"New calculating tables for multiplication and division by all numbers of from one to four places." We have only had the 1919 edition in hands, and we reconstructed it in [87].]

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[37] Johann Theodor Peters. *Fünfstellige Logarithmentafel der trigonometrischen Funktionen für jede Zeitsekunde des Quadranten.* Berlin: Reimer, 1912. [reconstructed in [74]]

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[39] Johann Theodor Peters. *Dreistellige Tafeln für logarithmisches und numerisches Rechnen.* Berlin: P. Stankiewicz, 1913. [not seen, second edition in 1948 (seen), reconstructed in [72]]

[40] Johann Theodor Peters. *Siebenstellige Werte der trigonometrischen Funktionen von Tausendstel zu Tausendstel des Grades.* Berlin-Friedenau: Verlag der Optischen Anst. Goerz, 1918. [Reprinted in 1938 and 1941, as well as in 1942 in English with the title "Seven-place Values of trigonometric functions for every thousandth of a degree.", all four editions seen. Reconstructed in [77].]

[41] Johann Theodor Peters. *Zehnstellige Logarithmentafel : Hilfstafeln zur zehnstelligen Logarithmentafel.* Berlin: Preuß. Landesaufnahme, 1919. [not seen, second edition in 1957 (seen)]

[42] Johann Theodor Peters. *Zehnstellige Logarithmentafel, volume 2 : Zehnstellige Logarithmen der trigonometrischen Funktionen von 0° bis 90° für jedes Tausendstel des Grades.* Berlin: Reichsamt f. Landesaufnahme, 1919. [not seen, second edition in 1957 (seen); also Russian editions in 1964 and 1975; reconstructed in [89]]

[43] Johann Theodor Peters. *Sechsstellige Logarithmen der trigonometrischen Funktionen von 0° bis 90° für jedes Tausendstel des Grades.* Berlin: Verlag der preussischen Landesaufnahme, 1921. [reconstructed in [85]]

[44] Johann Theodor Peters. *Siebenstellige Logarithmen der trigonometrischen Funktionen von 0° bis 90° für jedes Tausendstel des Grades.* Berlin: Verlag der preussischen Landesaufnahme, 1921. [reconstructed in [86]]

[45] Johann Theodor Peters. *Zehnstellige Logarithmentafel volume 1 : Zehnstellige Logarithmen von 1 bis 100000 nebst einem Anhang mathematischer Tafeln.* Berlin: Reichsamt f. Landesaufnahme, 1922. [not seen, second edition in 1957 (seen); also Russian edition in 1964 and perhaps in 1975; reconstructed in [88]; the appendices on mathematical tables are by Peters, J. Stein and G. Witt]

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[47] Johann Theodor Peters. *Tafeln zur Verwandlung von rechtwinkligen Platten-Koordinaten und sphärischen Koordinaten ineinander.* Berlin: Ferd. Dümmler, 1929. [Veröffentlichungen des Astronomischen Rechen-Instituts zu Berlin-Dahlem, number 47]

[48] Johann Theodor Peters. *Multiplikations- und Interpolationstafeln für alle ein- bis dreistelligen Zahlen.* Berlin: Wichmann, 1930. [reprinted from [49]; reconstructed in [75]]

[49] Johann Theodor Peters. *Sechsstellige trigonometrische Tafel für neue Teilung.* Berlin: Wichmann, 1930. [seen, third edition in 1939 and fourth in 1942; an excerpt was reprinted as [48]; reconstructed in [79]]

[50] Johann Theodor Peters. *Präzessionstafeln für das Äquinoktium 1950.0.* Berlin: Ferd. Dümmler, 1934. [Veröffentlichungen des Astronomischen Rechen-Instituts zu Berlin-Dahlem, number 50]

[51] Johann Theodor Peters. *Tafeln zur Berechnung der jährlichen Präzession in Rektaszension für das Äquinoktium 1950.0.* Berlin: Ferd. Dümmler, 1934. [Veröffentlichungen des Astronomischen Rechen-Instituts zu Berlin-Dahlem, number 51]

[52] Johann Theodor Peters. *Hilfstafeln zur Verwandlung von Tangentialkoordinaten in Rektaszension und Deklination.* Berlin: Ferd. Dümmler, 1936. [Veröffentlichungen des Astronomischen Rechen-Instituts zu Berlin-Dahlem, number 52]

[53] Johann Theodor Peters. *Sechsstellige Werte der Kreis- und Evolventen-Funktionen von Hundertstel zu Hundertstel des Grades nebst einigen Hilfstafeln für die Zahnradtechnik.* Berlin: Ferd. Dümmler, 1937. [not seen, reprinted in 1951 and 1963 (seen); reconstructed in [84]]

[54] Johann Theodor Peters. *Sechsstellige Werte der trigonometrischen Funktionen von Tausendstel zu Tausendstel des Neugrades.* Berlin: Wichmann, 1938. [seen, 3rd edition in 1940, 5th and 6th in 1942, 7th in 1943, 9th in 1944, 10th in 1953, 12th in 1959, 14th in 1970, and other editions in 1973 and other years; reconstructed in [80]]

[55] Johann Theodor Peters. *Achtstellige Tafel der trigonometrischen Funktionen für jede Sexagesimalsekunde des Quadranten.* Berlin: Verlag des Reichsamts für

Landesaufnahme, 1939. [reprinted in 1943 (Ann Arbor, Michigan, perhaps in German, but with an English title) and in 1963, 1965 and 1968 in English under the title "Eight-Place Tables of trigonometric functions for every second of arc."; the last three editions have [35] as an appendix; there have also been two limited English editions in 1939 and 1940 [4]; the main table was reconstructed in [73]]

[56] Johann Theodor Peters. *Siebenstellige Logarithmentafel.* Berlin: Verlag des Reichsamts für Landesaufnahme, 1940. [2 volumes, 1: Logarithmen der Zahlen, Antilogarithmen, etc., 2: Logarithmen der trigonometrischen Funktionen für jede 10. Sekunde d. Neugrades, etc.; reconstructed in [81] and [82]]

[57] Johann Theodor Peters. *Siebenstellige Werte der trigonometrischen Funktionen von Tausendstel zu Tausendstel des Neugrades.* Berlin: Verlag des Reichsamts für Landesaufnahme, 1941. [reprinted in 1952, 1956 and 1967; reconstructed in [83]]

[58] Johann Theodor Peters, Alfred Lodge, Elsie Jane Ternouth, and Emma Gifford. *Factor table giving the complete decomposition of all numbers less than 100,000.* London: Office of the British Association, 1935. [introduction by Leslie J. Comrie, and bibliography of tables by James Henderson, reprinted in 1963] [reconstructed in [69]]

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[61] Johann Theodor Peters, Walter Storck, and F. Ludloff. *Hütte Hilfstafeln : zur I. Verwandlung von echten Brüchen in Dezimalbrüche ; II. Zerlegung der Zahlen bis 10000 in Primfaktoren ; ein Hilfsbuch zur Ermittelung geeigneter Zähnezahlen für Räderübersetzungen.* Berlin: Wilhelm Ernst & Sohn, 1922. [3rd edition]

[62] Johann Theodor Peters and Gustav Stracke. *Tafeln zur Berechnung der Mittelpunktsgleichung und des Radiusvektors in elliptischen Bahnen für Exzentrizitätswinkel von 0° bis 26°.* Berlin: Ferd. Dümmler, 1933. [Veröffentlichungen des Astronomischen Rechen-Instituts zu Berlin-Dahlem, number 41; second edition, first edition in 1912]

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[64] Denis Roegel. A reconstruction of De Decker-Vlacq's tables in the *Arithmetica logarithmica* (1628). Technical report, LORIA, Nancy, 2010. [This is a recalculation of the tables of [97].]

[65] Denis Roegel. A reconstruction of Henri Andoyer's table of logarithms (1911). Technical report, LORIA, Nancy, 2010. [This is a reconstruction of [2].]

[66] Denis Roegel. A reconstruction of Henri Andoyer's trigonometric tables (1915–1918). Technical report, LORIA, Nancy, 2010. [This is a reconstruction of [3].]

[67] Denis Roegel. A reconstruction of the tables of Briggs and Gellibrand's *Trigonometria Britannica* (1633). Technical report, LORIA, Nancy, 2010. [This is a recalculation of the tables of [17].]

[68] Denis Roegel. A reconstruction of the tables of Briggs' *Arithmetica logarithmica* (1624). Technical report, LORIA, Nancy, 2010. [This is a recalculation of the tables of [16].]

[69] Denis Roegel. A reconstruction of the table of factors of Peters, Lodge, Ternouth, and Gifford (1935). Technical report, LORIA, Nancy, 2011. [This is a recalculation of the tables of [58].]

[70] Denis Roegel. A reconstruction of Bauschinger and Peters's eight-place table of logarithms (volume 1, 1910). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [15].]

[71] Denis Roegel. A reconstruction of Bauschinger and Peters's eight-place table of logarithms (volume 2, 1911). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [15].]

[72] Denis Roegel. A reconstruction of Peters's 3-place tables (1913). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [39].]

[73] Denis Roegel. A reconstruction of Peters's eight-place table of trigonometric functions (1939). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [55].]

[74] Denis Roegel. A reconstruction of Peters's five-place table of logarithms of trigonometric functions (1912). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [37].]

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[78] Denis Roegel. A reconstruction of Peters's six-place table of trigonometric functions (1929). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [46].]

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[80] Denis Roegel. A reconstruction of Peters's six-place table of trigonometric functions for the new division (1938). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [54].]

[81] Denis Roegel. A reconstruction of Peters's table of 7-place logarithms (volume 1, 1940). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [56].]

[82] Denis Roegel. A reconstruction of Peters's table of 7-place logarithms (volume 2, 1940). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [56].]

[83] Denis Roegel. A reconstruction of Peters's table of 7-place trigonometrical values for the new division (1941). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [57].]

[84] Denis Roegel. A reconstruction of Peters's table of involutes (1937). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [53].]

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[86] Denis Roegel. A reconstruction of Peters's table of logarithms to 7 places (1921). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [44].]

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[88] Denis Roegel. A reconstruction of Peters's ten-place table of logarithms (volume 1, 1922). Technical report, LORIA, Nancy, 2016. [This is a reconstruction of [45].]

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[91] Sa. Review of "J. Peters: Achtstellige Tafel der trigonometrischen Funktionen für jede Sexagesimalsekunde des Quadranten". *Astronomische Nachrichten*, 269(2):120, 1939. [review of [55]]

[92] Karl Schütte. *Index mathematischer Tafelwerke und Tabellen aus allen Gebieten der Naturwissenschaften*. München: R. Oldenbourg, 1955.

[93] Dmitriĭ Selivanov, Julius Bauschinger, and Marie Henri Andoyer. Le calcul des différences et interpolation. In Jules Molk, editor, *Encyclopédie des sciences mathématiques pures et appliquées*, volume 1(4) (fasc. 1), pages 47–160. Paris: Gauthier-Villars, 1906. [includes a French edition of [13]]

[94] Daniel Shanks. Jean Peters, Eight-place tables of trigonometric functions for every second of arc. *Mathematics of Computation*, 18(87):509, 1964. [review of the edition published in 1963 [55]]

[95] Gustav Stracke. Julius Bauschinger. *Monthly Notices of the Royal Astronomical Society*, 95(4):336–337, 1935.

[96] John Todd. J. Peters, Ten-place logarithm table. *Mathematical Tables and other Aids to Computation*, 12:61–63, 1958. [review of the 2nd edition published in 1957 [45, 42]]

[97] Adriaan Vlacq. *Arithmetica logarithmica*. Gouda: Pieter Rammazeyn, 1628. [The introduction was reprinted in 1976 by Olms and the tables were reconstructed by D. Roegel in 2010. [64]]

[98] Adriaan Vlacq. *Trigonometria artificialis*. Gouda: Pieter Rammazeyn, 1633. [The tables were reconstructed by D. Roegel in 2010. [63]]

[99] Stephan Weiss. Die Differenzmaschine von Hamann und die Berechnung der Logarithmen, 2006. `www.mechrech.info/publikat/HamDiffM.pdf`

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[101] Roland Wielen and Ute Wielen. *Die Reglements und Statuten des Astronomischen Rechen-Instituts und zugehörige Schriftstücke im Archiv des Instituts. Edition der Dokumente*. Heidelberg: Astronomisches Rechen-Institut, 2011. [pp. 255–258 on some archives on Peters]

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[103] Roland Wielen, Ute Wielen, Herbert Hefele, and Inge Heinrich. *Die Geschichte der Bibliothek des Astronomischen Rechen-Instituts*. Heidelberg: Astronomisches Rechen-Institut, 2014. [various information on Peters]

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Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	0	10	20	30	40	50	60	70	80	90	100
0.00	0	5	10	15	20	25	30	35	40	45	50
01	0	5	10	15	20	25	30	35	40	45	49
02	0	5	10	15	20	24	29	34	39	44	49
03	0	5	10	15	19	24	29	34	39	44	48
04	0	5	10	14	19	24	29	34	38	43	48
05	0	5	9	14	19	24	28	33	38	43	47
06	0	5	9	14	19	23	28	33	38	42	47
07	0	5	9	14	19	23	28	33	37	42	46
08	0	5	9	14	18	23	28	32	37	41	46
09	0	5	9	14	18	23	27	32	36	41	45
0.10	0	4	9	13	18	22	27	31	36	40	45
11	0	4	9	13	18	22	27	31	36	40	44
12	0	4	9	13	18	22	26	31	35	40	44
13	0	4	9	13	17	22	26	30	35	39	43
14	0	4	9	13	17	21	26	30	34	39	43
15	0	4	8	13	17	21	25	30	34	38	42
16	0	4	8	13	17	21	25	29	34	38	42
17	0	4	8	12	17	21	25	29	33	37	41
18	0	4	8	12	16	20	25	29	33	37	41
19	0	4	8	12	16	20	24	28	32	36	40
0.20	0	4	8	12	16	20	24	28	32	36	40
21	0	4	8	12	16	20	24	28	32	36	39
22	0	4	8	12	16	19	23	27	31	35	39
23	0	4	8	12	15	19	23	27	31	35	38
24	0	4	8	11	15	19	23	27	30	34	38
25	0	4	7	11	15	19	22	26	30	34	37
26	0	4	7	11	15	18	22	26	30	33	37
27	0	4	7	11	15	18	22	26	29	33	36
28	0	4	7	11	14	18	22	25	29	32	36
29	0	4	7	11	14	18	21	25	28	32	35
0.30	0	3	7	10	14	17	21	24	28	31	35
31	0	3	7	10	14	17	21	24	28	31	34
32	0	3	7	10	14	17	20	24	27	31	34
33	0	3	7	10	13	17	20	23	27	30	33
34	0	3	7	10	13	16	20	23	26	30	33
35	0	3	6	10	13	16	19	23	26	29	32
36	0	3	6	10	13	16	19	22	26	29	32
37	0	3	6	9	13	16	19	22	25	28	31
38	0	3	6	9	12	15	19	22	25	28	31
39	0	3	6	9	12	15	18	21	24	27	30
0.40	0	3	6	9	12	15	18	21	24	27	30
41	0	3	6	9	12	15	18	21	24	27	29
42	0	3	6	9	12	14	17	20	23	26	29
43	0	3	6	9	11	14	17	20	23	26	28
44	0	3	6	8	11	14	17	20	22	25	28
45	0	3	5	8	11	14	16	19	22	25	27
46	0	3	5	8	11	13	16	19	22	24	27
47	0	3	5	8	11	13	16	19	21	24	26
48	0	3	5	8	10	13	16	18	21	23	26
49	0	3	5	8	10	13	15	18	20	23	25
0.50	0	2	5	7	10	12	15	17	20	22	25

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	0	10	20	30	40	50	60	70	80	90	100
0.50	0	2	5	7	10	12	15	17	20	22	25
01	0	2	5	7	10	12	15	17	20	22	24
02	0	2	5	7	10	12	14	17	19	22	24
03	0	2	5	7	9	12	14	16	19	21	23
04	0	2	5	7	9	11	14	16	18	21	23
05	0	2	4	7	9	11	13	16	18	20	22
06	0	2	4	7	9	11	13	15	18	20	22
07	0	2	4	6	9	11	13	15	17	19	21
08	0	2	4	6	8	10	13	15	17	19	21
09	0	2	4	6	8	10	12	14	16	18	20
0.60	0	2	4	6	8	10	12	14	16	18	20
11	0	2	4	6	8	10	12	14	16	18	19
12	0	2	4	6	8	9	11	13	15	17	19
13	0	2	4	6	7	9	11	13	15	17	18
14	0	2	4	5	7	9	11	13	14	16	18
15	0	2	3	5	7	9	10	12	14	16	17
16	0	2	3	5	7	8	10	12	14	15	17
17	0	2	3	5	7	8	10	12	13	15	16
18	0	2	3	5	6	8	10	11	13	14	16
19	0	2	3	5	6	8	9	11	12	14	15
0.70	0	1	3	4	6	7	9	10	12	13	15
21	0	1	3	4	6	7	9	10	12	13	14
22	0	1	3	4	6	7	8	10	11	13	14
23	0	1	3	4	5	7	8	9	11	12	13
24	0	1	3	4	5	6	8	9	10	12	13
25	0	1	2	4	5	6	7	9	10	11	12
26	0	1	2	4	5	6	7	8	10	11	12
27	0	1	2	3	5	6	7	8	9	10	11
28	0	1	2	3	4	5	7	8	9	10	11
29	0	1	2	3	4	5	6	7	8	9	10
0.80	0	1	2	3	4	5	6	7	8	9	10
31	0	1	2	3	4	5	6	7	8	9	9
32	0	1	2	3	4	4	5	6	7	8	9
33	0	1	2	3	3	4	5	6	7	8	8
34	0	1	2	2	3	4	5	6	6	7	8
35	0	1	1	2	3	4	4	5	6	7	7
36	0	1	1	2	3	3	4	5	6	6	7
37	0	1	1	2	3	3	4	5	5	6	6
38	0	1	1	2	2	3	4	4	5	5	6
39	0	1	1	2	2	3	3	4	4	5	5
0.90	0	0	1	1	2	2	3	3	4	4	5
41	0	0	1	1	2	2	3	3	4	4	4
42	0	0	1	1	2	2	2	3	3	4	4
43	0	0	1	1	1	2	2	2	3	3	3
44	0	0	1	1	1	1	2	2	2	3	3
45	0	0	0	1	1	1	1	2	2	2	2
46	0	0	0	1	1	1	1	1	2	2	2
47	0	0	0	0	1	1	1	1	1	1	1
48	0	0	0	0	0	0	1	1	1	1	1
49	0	0	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0	0	0

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	100	110	120	130	140	150	160	170	180	190	200
0.00	50	55	60	65	70	75	80	85	90	95	100
01	49	54	59	64	69	74	79	84	89	94	99
02	49	54	59	64	69	73	78	83	88	93	98
03	48	53	58	63	68	73	78	82	87	92	97
04	48	53	58	62	67	72	77	82	86	91	96
05	47	52	57	62	66	71	76	81	85	90	95
06	47	52	56	61	66	70	75	80	85	89	94
07	46	51	56	60	65	70	74	79	84	88	93
08	46	51	55	60	64	69	74	78	83	87	92
09	45	50	55	59	64	68	73	77	82	86	91
0.10	45	49	54	58	63	67	72	76	81	85	90
11	44	49	53	58	62	67	71	76	80	85	89
12	44	48	53	57	62	66	70	75	79	84	88
13	43	48	52	57	61	65	70	74	78	83	87
14	43	47	52	56	60	64	69	73	77	82	86
15	42	47	51	55	59	64	68	72	76	81	85
16	42	46	50	55	59	63	67	71	76	80	84
17	41	46	50	54	58	62	66	71	75	79	83
18	41	45	49	53	57	61	66	70	74	78	82
19	40	45	49	53	57	61	65	69	73	77	81
0.20	40	44	48	52	56	60	64	68	72	76	80
21	39	43	47	51	55	59	63	67	71	75	79
22	39	43	47	51	55	58	62	66	70	74	78
23	38	42	46	50	54	58	62	65	69	73	77
24	38	42	46	49	53	57	61	65	68	72	76
25	37	41	45	49	52	56	60	64	67	71	75
26	37	41	44	48	52	55	59	63	67	70	74
27	36	40	44	47	51	55	58	62	66	69	73
28	36	40	43	47	50	54	58	61	65	68	72
29	35	39	43	46	50	53	57	60	64	67	71
0.30	35	38	42	45	49	52	56	59	63	66	70
31	34	38	41	45	48	52	55	59	62	66	69
32	34	37	41	44	48	51	54	58	61	65	68
33	33	37	40	44	47	50	54	57	60	64	67
34	33	36	40	43	46	49	53	56	59	63	66
35	32	36	39	42	45	49	52	55	58	62	65
36	32	35	38	42	45	48	51	54	58	61	64
37	31	35	38	41	44	47	50	54	57	60	63
38	31	34	37	40	43	46	50	53	56	59	62
39	30	34	37	40	43	46	49	52	55	58	61
0.40	30	33	36	39	42	45	48	51	54	57	60
41	29	32	35	38	41	44	47	50	53	56	59
42	29	32	35	38	41	43	46	49	52	55	58
43	28	31	34	37	40	43	46	48	51	54	57
44	28	31	34	36	39	42	45	48	50	53	56
45	27	30	33	36	38	41	44	47	49	52	55
46	27	30	32	35	38	40	43	46	49	51	54
47	26	29	32	34	37	40	42	45	48	50	53
48	26	29	31	34	36	39	42	44	47	49	52
49	25	28	31	33	36	38	41	43	46	48	51
0.50	25	27	30	32	35	37	40	42	45	47	50

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	100	110	120	130	140	150	160	170	180	190	200
0.50	25	27	30	32	35	37	40	42	45	47	50
01	24	27	29	32	34	37	39	42	44	47	49
02	24	26	29	31	34	36	38	41	43	46	48
03	23	26	28	31	33	35	38	40	42	45	47
04	23	25	28	30	32	34	37	39	41	44	46
05	22	25	27	29	31	34	36	38	40	43	45
06	22	24	26	29	31	33	35	37	40	42	44
07	21	24	26	28	30	32	34	37	39	41	43
08	21	23	25	27	29	31	34	36	38	40	42
09	20	23	25	27	29	31	33	35	37	39	41
0.60	20	22	24	26	28	30	32	34	36	38	40
11	19	21	23	25	27	29	31	33	35	37	39
12	19	21	23	25	27	28	30	32	34	36	38
13	18	20	22	24	26	28	30	31	33	35	37
14	18	20	22	23	25	27	29	31	32	34	36
15	17	19	21	23	24	26	28	30	31	33	35
16	17	19	20	22	24	25	27	29	31	32	34
17	16	18	20	21	23	25	26	28	30	31	33
18	16	18	19	21	22	24	26	27	29	30	32
19	15	17	19	20	22	23	25	26	28	29	31
0.70	15	16	18	19	21	22	24	25	27	28	30
21	14	16	17	19	20	22	23	25	26	28	29
22	14	15	17	18	20	21	22	24	25	27	28
23	13	15	16	18	19	20	22	23	24	26	27
24	13	14	16	17	18	19	21	22	23	25	26
25	12	14	15	16	17	19	20	21	22	24	25
26	12	13	14	16	17	18	19	20	22	23	24
27	11	13	14	15	16	17	18	20	21	22	23
28	11	12	13	14	15	16	18	19	20	21	22
29	10	12	13	14	15	16	17	18	19	20	21
0.80	10	11	12	13	14	15	16	17	18	19	20
31	9	10	11	12	13	14	15	16	17	18	19
32	9	10	11	12	13	13	14	15	16	17	18
33	8	9	10	11	12	13	14	14	15	16	17
34	8	9	10	10	11	12	13	14	14	15	16
35	7	8	9	10	10	11	12	13	13	14	15
36	7	8	8	9	10	10	11	12	13	13	14
37	6	7	8	8	9	10	10	11	12	12	13
38	6	7	7	8	8	9	10	10	11	11	12
39	5	6	7	7	8	8	9	9	10	10	11
0.90	5	5	6	6	7	7	8	8	9	9	10
41	4	5	5	6	6	7	7	8	8	9	9
42	4	4	5	5	6	6	6	7	7	8	8
43	3	4	4	5	5	5	6	6	6	7	7
44	3	3	4	4	4	4	5	5	5	6	6
45	2	3	3	3	3	4	4	4	4	5	5
46	2	2	2	3	3	3	3	3	4	4	4
47	1	2	2	2	2	2	2	3	3	3	3
48	1	1	1	1	1	1	2	2	2	2	2
49	0	1	1	1	1	1	1	1	1	1	1
1.00	0	0	0	0	0	0	0	0	0	0	0

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	200	210	220	230	240	250	260	270	280	290	300
0.00	100	105	110	115	120	125	130	135	140	145	150
01	99	104	109	114	119	124	129	134	139	144	148
02	98	103	108	113	118	122	127	132	137	142	147
03	97	102	107	112	116	121	126	131	136	141	145
04	96	101	106	110	115	120	125	130	134	139	144
05	95	100	104	109	114	119	123	128	133	138	142
06	94	99	103	108	113	117	122	127	132	136	141
07	93	98	102	107	112	116	121	126	130	135	139
08	92	97	101	106	110	115	120	124	129	133	138
09	91	96	100	105	109	114	118	123	127	132	136
0.10	90	94	99	103	108	112	117	121	126	130	135
11	89	93	98	102	107	111	116	120	125	129	133
12	88	92	97	101	106	110	114	119	123	128	132
13	87	91	96	100	104	109	113	117	122	126	130
14	86	90	95	99	103	107	112	116	120	125	129
15	85	89	93	98	102	106	110	115	119	123	127
16	84	88	92	97	101	105	109	113	118	122	126
17	83	87	91	95	100	104	108	112	116	120	124
18	82	86	90	94	98	102	107	111	115	119	123
19	81	85	89	93	97	101	105	109	113	117	121
0.20	80	84	88	92	96	100	104	108	112	116	120
21	79	83	87	91	95	99	103	107	111	115	118
22	78	82	86	90	94	97	101	105	109	113	117
23	77	81	85	89	92	96	100	104	108	112	115
24	76	80	84	87	91	95	99	103	106	110	114
25	75	79	82	86	90	94	97	101	105	109	112
26	74	78	81	85	89	92	96	100	104	107	111
27	73	77	80	84	88	91	95	99	102	106	109
28	72	76	79	83	86	90	94	97	101	104	108
29	71	75	78	82	85	89	92	96	99	103	106
0.30	70	73	77	80	84	87	91	94	98	101	105
31	69	72	76	79	83	86	90	93	97	100	103
32	68	71	75	78	82	85	88	92	95	99	102
33	67	70	74	77	80	84	87	90	94	97	100
34	66	69	73	76	79	82	86	89	92	96	99
35	65	68	71	75	78	81	84	88	91	94	97
36	64	67	70	74	77	80	83	86	90	93	96
37	63	66	69	72	76	79	82	85	88	91	94
38	62	65	68	71	74	77	81	84	87	90	93
39	61	64	67	70	73	76	79	82	85	88	91
0.40	60	63	66	69	72	75	78	81	84	87	90
41	59	62	65	68	71	74	77	80	83	86	88
42	58	61	64	67	70	72	75	78	81	84	87
43	57	60	63	66	68	71	74	77	80	83	85
44	56	59	62	64	67	70	73	76	78	81	84
45	55	58	60	63	66	69	71	74	77	80	82
46	54	57	59	62	65	67	70	73	76	78	81
47	53	56	58	61	64	66	69	72	74	77	79
48	52	55	57	60	62	65	68	70	73	75	78
49	51	54	56	59	61	64	66	69	71	74	76
0.50	50	52	55	57	60	62	65	67	70	72	75

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	200	210	220	230	240	250	260	270	280	290	300
0.50	50	52	55	57	60	62	65	67	70	72	75
01	49	51	54	56	59	61	64	66	69	71	73
02	48	50	53	55	58	60	62	65	67	70	72
03	47	49	52	54	56	59	61	63	66	68	70
04	46	48	51	53	55	57	60	62	64	67	69
05	45	47	49	52	54	56	58	61	63	65	67
06	44	46	48	51	53	55	57	59	62	64	66
07	43	45	47	49	52	54	56	58	60	62	64
08	42	44	46	48	50	52	55	57	59	61	63
09	41	43	45	47	49	51	53	55	57	59	61
0.60	40	42	44	46	48	50	52	54	56	58	60
11	39	41	43	45	47	49	51	53	55	57	58
12	38	40	42	44	46	47	49	51	53	55	57
13	37	39	41	43	44	46	48	50	52	54	55
14	36	38	40	41	43	45	47	49	50	52	54
15	35	37	38	40	42	44	45	47	49	51	52
16	34	36	37	39	41	42	44	46	48	49	51
17	33	35	36	38	40	41	43	45	46	48	49
18	32	34	35	37	38	40	42	43	45	46	48
19	31	33	34	36	37	39	40	42	43	45	46
0.70	30	31	33	34	36	37	39	40	42	43	45
21	29	30	32	33	35	36	38	39	41	42	43
22	28	29	31	32	34	35	36	38	39	41	42
23	27	28	30	31	32	34	35	36	38	39	40
24	26	27	29	30	31	32	34	35	36	38	39
25	25	26	27	29	30	31	32	34	35	36	37
26	24	25	26	28	29	30	31	32	34	35	36
27	23	24	25	26	28	29	30	31	32	33	34
28	22	23	24	25	26	27	29	30	31	32	33
29	21	22	23	24	25	26	27	28	29	30	31
0.80	20	21	22	23	24	25	26	27	28	29	30
31	19	20	21	22	23	24	25	26	27	28	28
32	18	19	20	21	22	22	23	24	25	26	27
33	17	18	19	20	20	21	22	23	24	25	25
34	16	17	18	18	19	20	21	22	22	23	24
35	15	16	16	17	18	19	19	20	21	22	22
36	14	15	15	16	17	17	18	19	20	20	21
37	13	14	14	15	16	16	17	18	18	19	19
38	12	13	13	14	14	15	16	16	17	17	18
39	11	12	12	13	13	14	14	15	15	16	16
0.90	10	10	11	11	12	12	13	13	14	14	15
41	9	9	10	10	11	11	12	12	13	13	13
42	8	8	9	9	10	10	10	11	11	12	12
43	7	7	8	8	8	9	9	9	10	10	10
44	6	6	7	7	7	7	8	8	8	9	9
45	5	5	5	6	6	6	6	7	7	7	7
46	4	4	4	5	5	5	5	5	6	6	6
47	3	3	3	3	4	4	4	4	4	4	4
48	2	2	2	2	2	2	3	3	3	3	3
49	1	1	1	1	1	1	1	1	1	1	1
1.00	0	0	0	0	0	0	0	0	0	0	0

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	300	310	320	330	340	350	360	370	380	390	400
0.00	150	155	160	165	170	175	180	185	190	195	200
01	148	153	158	163	168	173	178	183	188	193	198
02	147	152	157	162	167	171	176	181	186	191	196
03	145	150	155	160	165	170	175	179	184	189	194
04	144	149	154	158	163	168	173	178	182	187	192
05	142	147	152	157	161	166	171	176	180	185	190
06	141	146	150	155	160	164	169	174	179	183	188
07	139	144	149	153	158	163	167	172	177	181	186
08	138	143	147	152	156	161	166	170	175	179	184
09	136	141	146	150	155	159	164	168	173	177	182
0.10	135	139	144	148	153	157	162	166	171	175	180
11	133	138	142	147	151	156	160	165	169	174	178
12	132	136	141	145	150	154	158	163	167	172	176
13	130	135	139	144	148	152	157	161	165	170	174
14	129	133	138	142	146	150	155	159	163	168	172
15	127	132	136	140	144	149	153	157	161	166	170
16	126	130	134	139	143	147	151	155	160	164	168
17	124	129	133	137	141	145	149	154	158	162	166
18	123	127	131	135	139	143	148	152	156	160	164
19	121	126	130	134	138	142	146	150	154	158	162
0.20	120	124	128	132	136	140	144	148	152	156	160
21	118	122	126	130	134	138	142	146	150	154	158
22	117	121	125	129	133	136	140	144	148	152	156
23	115	119	123	127	131	135	139	142	146	150	154
24	114	118	122	125	129	133	137	141	144	148	152
25	112	116	120	124	127	131	135	139	142	146	150
26	111	115	118	122	126	129	133	137	141	144	148
27	109	113	117	120	124	128	131	135	139	142	146
28	108	112	115	119	122	126	130	133	137	140	144
29	106	110	114	117	121	124	128	131	135	138	142
0.30	105	108	112	115	119	122	126	129	133	136	140
31	103	107	110	114	117	121	124	128	131	135	138
32	102	105	109	112	116	119	122	126	129	133	136
33	100	104	107	111	114	117	121	124	127	131	134
34	99	102	106	109	112	115	119	122	125	129	132
35	97	101	104	107	110	114	117	120	123	127	130
36	96	99	102	106	109	112	115	118	122	125	128
37	94	98	101	104	107	110	113	117	120	123	126
38	93	96	99	102	105	108	112	115	118	121	124
39	91	95	98	101	104	107	110	113	116	119	122
0.40	90	93	96	99	102	105	108	111	114	117	120
41	88	91	94	97	100	103	106	109	112	115	118
42	87	90	93	96	99	101	104	107	110	113	116
43	85	88	91	94	97	100	103	105	108	111	114
44	84	87	90	92	95	98	101	104	106	109	112
45	82	85	88	91	93	96	99	102	104	107	110
46	81	84	86	89	92	94	97	100	103	105	108
47	79	82	85	87	90	93	95	98	101	103	106
48	78	81	83	86	88	91	94	96	99	101	104
49	76	79	82	84	87	89	92	94	97	99	102
0.50	75	77	80	82	85	87	90	92	95	97	100

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	300	310	320	330	340	350	360	370	380	390	400
0.50	75	77	80	82	85	87	90	92	95	97	100
01	73	76	78	81	83	86	88	91	93	96	98
02	72	74	77	79	82	84	86	89	91	94	96
03	70	73	75	78	80	82	85	87	89	92	94
04	69	71	74	76	78	80	83	85	87	90	92
05	67	70	72	74	76	79	81	83	85	88	90
06	66	68	70	73	75	77	79	81	84	86	88
07	64	67	69	71	73	75	77	80	82	84	86
08	63	65	67	69	71	73	76	78	80	82	84
09	61	64	66	68	70	72	74	76	78	80	82
0.60	60	62	64	66	68	70	72	74	76	78	80
11	58	60	62	64	66	68	70	72	74	76	78
12	57	59	61	63	65	66	68	70	72	74	76
13	55	57	59	61	63	65	67	68	70	72	74
14	54	56	58	59	61	63	65	67	68	70	72
15	52	54	56	58	59	61	63	65	66	68	70
16	51	53	54	56	58	59	61	63	65	66	68
17	49	51	53	54	56	58	59	61	63	64	66
18	48	50	51	53	54	56	58	59	61	62	64
19	46	48	50	51	53	54	56	57	59	60	62
0.70	45	46	48	49	51	52	54	55	57	58	60
21	43	45	46	48	49	51	52	54	55	57	58
22	42	43	45	46	48	49	50	52	53	55	56
23	40	42	43	45	46	47	49	50	51	53	54
24	39	40	42	43	44	45	47	48	49	51	52
25	37	39	40	41	42	44	45	46	47	49	50
26	36	37	38	40	41	42	43	44	46	47	48
27	34	36	37	38	39	40	41	43	44	45	46
28	33	34	35	36	37	38	40	41	42	43	44
29	31	33	34	35	36	37	38	39	40	41	42
0.80	30	31	32	33	34	35	36	37	38	39	40
31	28	29	30	31	32	33	34	35	36	37	38
32	27	28	29	30	31	31	32	33	34	35	36
33	25	26	27	28	29	30	31	31	32	33	34
34	24	25	26	26	27	28	29	30	30	31	32
35	22	23	24	25	25	26	27	28	28	29	30
36	21	22	22	23	24	24	25	26	27	27	28
37	19	20	21	21	22	23	23	24	25	25	26
38	18	19	19	20	20	21	22	22	23	23	24
39	16	17	18	18	19	19	20	20	21	21	22
0.90	15	15	16	16	17	17	18	18	19	19	20
41	13	14	14	15	15	16	16	17	17	18	18
42	12	12	13	13	14	14	14	15	15	16	16
43	10	11	11	12	12	12	13	13	13	14	14
44	9	9	10	10	10	10	11	11	11	12	12
45	7	8	8	8	8	9	9	9	9	10	10
46	6	6	6	7	7	7	7	7	8	8	8
47	4	5	5	5	5	5	5	6	6	6	6
48	3	3	3	3	3	3	4	4	4	4	4
49	1	2	2	2	2	2	2	2	2	2	2
1.00	0	0	0	0	0	0	0	0	0	0	0

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	400	410	420	430	440	450	460	470	480	490	500
0.00	200	205	210	215	220	225	230	235	240	245	250
01	198	203	208	213	218	223	228	233	238	243	247
02	196	201	206	211	216	220	225	230	235	240	245
03	194	199	204	209	213	218	223	228	233	238	242
04	192	197	202	206	211	216	221	226	230	235	240
05	190	195	199	204	209	214	218	223	228	233	237
06	188	193	197	202	207	211	216	221	226	230	235
07	186	191	195	200	205	209	214	219	223	228	232
08	184	189	193	198	202	207	212	216	221	225	230
09	182	187	191	196	200	205	209	214	218	223	227
0.10	180	184	189	193	198	202	207	211	216	220	225
11	178	182	187	191	196	200	205	209	214	218	222
12	176	180	185	189	194	198	202	207	211	216	220
13	174	178	183	187	191	196	200	204	209	213	217
14	172	176	181	185	189	193	198	202	206	211	215
15	170	174	178	183	187	191	195	200	204	208	212
16	168	172	176	181	185	189	193	197	202	206	210
17	166	170	174	178	183	187	191	195	199	203	207
18	164	168	172	176	180	184	189	193	197	201	205
19	162	166	170	174	178	182	186	190	194	198	202
0.20	160	164	168	172	176	180	184	188	192	196	200
21	158	162	166	170	174	178	182	186	190	194	197
22	156	160	164	168	172	175	179	183	187	191	195
23	154	158	162	166	169	173	177	181	185	189	192
24	152	156	160	163	167	171	175	179	182	186	190
25	150	154	157	161	165	169	172	176	180	184	187
26	148	152	155	159	163	166	170	174	178	181	185
27	146	150	153	157	161	164	168	172	175	179	182
28	144	148	151	155	158	162	166	169	173	176	180
29	142	146	149	153	156	160	163	167	170	174	177
0.30	140	143	147	150	154	157	161	164	168	171	175
31	138	141	145	148	152	155	159	162	166	169	172
32	136	139	143	146	150	153	156	160	163	167	170
33	134	137	141	144	147	151	154	157	161	164	167
34	132	135	139	142	145	148	152	155	158	162	165
35	130	133	136	140	143	146	149	153	156	159	162
36	128	131	134	138	141	144	147	150	154	157	160
37	126	129	132	135	139	142	145	148	151	154	157
38	124	127	130	133	136	139	143	146	149	152	155
39	122	125	128	131	134	137	140	143	146	149	152
0.40	120	123	126	129	132	135	138	141	144	147	150
41	118	121	124	127	130	133	136	139	142	145	147
42	116	119	122	125	128	130	133	136	139	142	145
43	114	117	120	123	125	128	131	134	137	140	142
44	112	115	118	120	123	126	129	132	134	137	140
45	110	113	115	118	121	124	126	129	132	135	137
46	108	111	113	116	119	121	124	127	130	132	135
47	106	109	111	114	117	119	122	125	127	130	132
48	104	107	109	112	114	117	120	122	125	127	130
49	102	105	107	110	112	115	117	120	122	125	127
0.50	100	102	105	107	110	112	115	117	120	122	125

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	400	410	420	430	440	450	460	470	480	490	500
0.50	100	102	105	107	110	112	115	117	120	122	125
01	98	100	103	105	108	110	113	115	118	120	122
02	96	98	101	103	106	108	110	113	115	118	120
03	94	96	99	101	103	106	108	110	113	115	117
04	92	94	97	99	101	103	106	108	110	113	115
05	90	92	94	97	99	101	103	106	108	110	112
06	88	90	92	95	97	99	101	103	106	108	110
07	86	88	90	92	95	97	99	101	103	105	107
08	84	86	88	90	92	94	97	99	101	103	105
09	82	84	86	88	90	92	94	96	98	100	102
0.60	80	82	84	86	88	90	92	94	96	98	100
11	78	80	82	84	86	88	90	92	94	96	97
12	76	78	80	82	84	85	87	89	91	93	95
13	74	76	78	80	81	83	85	87	89	91	92
14	72	74	76	77	79	81	83	85	86	88	90
15	70	72	73	75	77	79	80	82	84	86	87
16	68	70	71	73	75	76	78	80	82	83	85
17	66	68	69	71	73	74	76	78	79	81	82
18	64	66	67	69	70	72	74	75	77	78	80
19	62	64	65	67	68	70	71	73	74	76	77
0.70	60	61	63	64	66	67	69	70	72	73	75
21	58	59	61	62	64	65	67	68	70	71	72
22	56	57	59	60	62	63	64	66	67	69	70
23	54	55	57	58	59	61	62	63	65	66	67
24	52	53	55	56	57	58	60	61	62	64	65
25	50	51	52	54	55	56	57	59	60	61	62
26	48	49	50	52	53	54	55	56	58	59	60
27	46	47	48	49	51	52	53	54	55	56	57
28	44	45	46	47	48	49	51	52	53	54	55
29	42	43	44	45	46	47	48	49	50	51	52
0.80	40	41	42	43	44	45	46	47	48	49	50
31	38	39	40	41	42	43	44	45	46	47	47
32	36	37	38	39	40	40	41	42	43	44	45
33	34	35	36	37	37	38	39	40	41	42	42
34	32	33	34	34	35	36	37	38	38	39	40
35	30	31	31	32	33	34	34	35	36	37	37
36	28	29	29	30	31	31	32	33	34	34	35
37	26	27	27	28	29	29	30	31	31	32	32
38	24	25	25	26	26	27	28	28	29	29	30
39	22	23	23	24	24	25	25	26	26	27	27
0.90	20	20	21	21	22	22	23	23	24	24	25
41	18	18	19	19	20	20	21	21	22	22	22
42	16	16	17	17	18	18	18	19	19	20	20
43	14	14	15	15	15	16	16	16	17	17	17
44	12	12	13	13	13	13	14	14	14	15	15
45	10	10	10	11	11	11	11	12	12	12	12
46	8	8	8	9	9	9	9	9	10	10	10
47	6	6	6	6	7	7	7	7	7	7	7
48	4	4	4	4	4	4	5	5	5	5	5
49	2	2	2	2	2	2	2	2	2	2	2
1.00	0	0	0	0	0	0	0	0	0	0	0

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	500	510	520	530	540	550	560	570	580	590	600
0.00	250	255	260	265	270	275	280	285	290	295	300
01	247	252	257	262	267	272	277	282	287	292	297
02	245	250	255	260	265	269	274	279	284	289	294
03	242	247	252	257	262	267	272	276	281	286	291
04	240	245	250	254	259	264	269	274	278	283	288
05	237	242	247	252	256	261	266	271	275	280	285
06	235	240	244	249	254	258	263	268	273	277	282
07	232	237	242	246	251	256	260	265	270	274	279
08	230	235	239	244	248	253	258	262	267	271	276
09	227	232	237	241	246	250	255	259	264	268	273
0.10	225	229	234	238	243	247	252	256	261	265	270
11	222	227	231	236	240	245	249	254	258	263	267
12	220	224	229	233	238	242	246	251	255	260	264
13	217	222	226	231	235	239	244	248	252	257	261
14	215	219	224	228	232	236	241	245	249	254	258
15	212	217	221	225	229	234	238	242	246	251	255
16	210	214	218	223	227	231	235	239	244	248	252
17	207	212	216	220	224	228	232	237	241	245	249
18	205	209	213	217	221	225	230	234	238	242	246
19	202	207	211	215	219	223	227	231	235	239	243
0.20	200	204	208	212	216	220	224	228	232	236	240
21	197	201	205	209	213	217	221	225	229	233	237
22	195	199	203	207	211	214	218	222	226	230	234
23	192	196	200	204	208	212	216	219	223	227	231
24	190	194	198	201	205	209	213	217	220	224	228
25	187	191	195	199	202	206	210	214	217	221	225
26	185	189	192	196	200	203	207	211	215	218	222
27	182	186	190	193	197	201	204	208	212	215	219
28	180	184	187	191	194	198	202	205	209	212	216
29	177	181	185	188	192	195	199	202	206	209	213
0.30	175	178	182	185	189	192	196	199	203	206	210
31	172	176	179	183	186	190	193	197	200	204	207
32	170	173	177	180	184	187	190	194	197	201	204
33	167	171	174	178	181	184	188	191	194	198	201
34	165	168	172	175	178	181	185	188	191	195	198
35	162	166	169	172	175	179	182	185	188	192	195
36	160	163	166	170	173	176	179	182	186	189	192
37	157	161	164	167	170	173	176	180	183	186	189
38	155	158	161	164	167	170	174	177	180	183	186
39	152	156	159	162	165	168	171	174	177	180	183
0.40	150	153	156	159	162	165	168	171	174	177	180
41	147	150	153	156	159	162	165	168	171	174	177
42	145	148	151	154	157	159	162	165	168	171	174
43	142	145	148	151	154	157	160	162	165	168	171
44	140	143	146	148	151	154	157	160	162	165	168
45	137	140	143	146	148	151	154	157	159	162	165
46	135	138	140	143	146	148	151	154	157	159	162
47	132	135	138	140	143	146	148	151	154	156	159
48	130	133	135	138	140	143	146	148	151	153	156
49	127	130	133	135	138	140	143	145	148	150	153
0.50	125	127	130	132	135	137	140	142	145	147	150

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	500	510	520	530	540	550	560	570	580	590	600
0.50	125	127	130	132	135	137	140	142	145	147	150
01	122	125	127	130	132	135	137	140	142	145	147
02	120	122	125	127	130	132	134	137	139	142	144
03	117	120	122	125	127	129	132	134	136	139	141
04	115	117	120	122	124	126	129	131	133	136	138
05	112	115	117	119	121	124	126	128	130	133	135
06	110	112	114	117	119	121	123	125	128	130	132
07	107	110	112	114	116	118	120	123	125	127	129
08	105	107	109	111	113	115	118	120	122	124	126
09	102	105	107	109	111	113	115	117	119	121	123
0.60	100	102	104	106	108	110	112	114	116	118	120
11	97	99	101	103	105	107	109	111	113	115	117
12	95	97	99	101	103	104	106	108	110	112	114
13	92	94	96	98	100	102	104	105	107	109	111
14	90	92	94	95	97	99	101	103	104	106	108
15	87	89	91	93	94	96	98	100	101	103	105
16	85	87	88	90	92	93	95	97	99	100	102
17	82	84	86	87	89	91	92	94	96	97	99
18	80	82	83	85	86	88	90	91	93	94	96
19	77	79	81	82	84	85	87	88	90	91	93
0.70	75	76	78	79	81	82	84	85	87	88	90
21	72	74	75	77	78	80	81	83	84	86	87
22	70	71	73	74	76	77	78	80	81	83	84
23	67	69	70	72	73	74	76	77	78	80	81
24	65	66	68	69	70	71	73	74	75	77	78
25	62	64	65	66	67	69	70	71	72	74	75
26	60	61	62	64	65	66	67	68	70	71	72
27	57	59	60	61	62	63	64	66	67	68	69
28	55	56	57	58	59	60	62	63	64	65	66
29	52	54	55	56	57	58	59	60	61	62	63
0.80	50	51	52	53	54	55	56	57	58	59	60
31	47	48	49	50	51	52	53	54	55	56	57
32	45	46	47	48	49	49	50	51	52	53	54
33	42	43	44	45	46	47	48	48	49	50	51
34	40	41	42	42	43	44	45	46	46	47	48
35	37	38	39	40	40	41	42	43	43	44	45
36	35	36	36	37	38	38	39	40	41	41	42
37	32	33	34	34	35	36	36	37	38	38	39
38	30	31	31	32	32	33	34	34	35	35	36
39	27	28	29	29	30	30	31	31	32	32	33
0.90	25	25	26	26	27	27	28	28	29	29	30
41	22	23	23	24	24	25	25	26	26	27	27
42	20	20	21	21	22	22	22	23	23	24	24
43	17	18	18	19	19	19	20	20	20	21	21
44	15	15	16	16	16	16	17	17	17	18	18
45	12	13	13	13	13	14	14	14	14	15	15
46	10	10	10	11	11	11	11	11	12	12	12
47	7	8	8	8	8	8	8	9	9	9	9
48	5	5	5	5	5	5	6	6	6	6	6
49	2	3	3	3	3	3	3	3	3	3	3
1.00	0	0	0	0	0	0	0	0	0	0	0

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	600	610	620	630	640	650	660	670	680	690	700
0.00	300	305	310	315	320	325	330	335	340	345	350
01	297	302	307	312	317	322	327	332	337	342	346
02	294	299	304	309	314	318	323	328	333	338	343
03	291	296	301	306	310	315	320	325	330	335	339
04	288	293	298	302	307	312	317	322	326	331	336
05	285	290	294	299	304	309	313	318	323	328	332
06	282	287	291	296	301	305	310	315	320	324	329
07	279	284	288	293	298	302	307	312	316	321	325
08	276	281	285	290	294	299	304	308	313	317	322
09	273	278	282	287	291	296	300	305	309	314	318
0.10	270	274	279	283	288	292	297	301	306	310	315
11	267	271	276	280	285	289	294	298	303	307	311
12	264	268	273	277	282	286	290	295	299	304	308
13	261	265	270	274	278	283	287	291	296	300	304
14	258	262	267	271	275	279	284	288	292	297	301
15	255	259	263	268	272	276	280	285	289	293	297
16	252	256	260	265	269	273	277	281	286	290	294
17	249	253	257	261	266	270	274	278	282	286	290
18	246	250	254	258	262	266	271	275	279	283	287
19	243	247	251	255	259	263	267	271	275	279	283
0.20	240	244	248	252	256	260	264	268	272	276	280
21	237	241	245	249	253	257	261	265	269	273	276
22	234	238	242	246	250	253	257	261	265	269	273
23	231	235	239	243	246	250	254	258	262	266	269
24	228	232	236	239	243	247	251	255	258	262	266
25	225	229	232	236	240	244	247	251	255	259	262
26	222	226	229	233	237	240	244	248	252	255	259
27	219	223	226	230	234	237	241	245	248	252	255
28	216	220	223	227	230	234	238	241	245	248	252
29	213	217	220	224	227	231	234	238	241	245	248
0.30	210	213	217	220	224	227	231	234	238	241	245
31	207	210	214	217	221	224	228	231	235	238	241
32	204	207	211	214	218	221	224	228	231	235	238
33	201	204	208	211	214	218	221	224	228	231	234
34	198	201	205	208	211	214	218	221	224	228	231
35	195	198	201	205	208	211	214	218	221	224	227
36	192	195	198	202	205	208	211	214	218	221	224
37	189	192	195	198	202	205	208	211	214	217	220
38	186	189	192	195	198	201	205	208	211	214	217
39	183	186	189	192	195	198	201	204	207	210	213
0.40	180	183	186	189	192	195	198	201	204	207	210
41	177	180	183	186	189	192	195	198	201	204	206
42	174	177	180	183	186	188	191	194	197	200	203
43	171	174	177	180	182	185	188	191	194	197	199
44	168	171	174	176	179	182	185	188	190	193	196
45	165	168	170	173	176	179	181	184	187	190	192
46	162	165	167	170	173	175	178	181	184	186	189
47	159	162	164	167	170	172	175	178	180	183	185
48	156	159	161	164	166	169	172	174	177	179	182
49	153	156	158	161	163	166	168	171	173	176	178
0.50	150	152	155	157	160	162	165	167	170	172	175

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	600	610	620	630	640	650	660	670	680	690	700
0.50	150	152	155	157	160	162	165	167	170	172	175
01	147	149	152	154	157	159	162	164	167	169	171
02	144	146	149	151	154	156	158	161	163	166	168
03	141	143	146	148	150	153	155	157	160	162	164
04	138	140	143	145	147	149	152	154	156	159	161
05	135	137	139	142	144	146	148	151	153	155	157
06	132	134	136	139	141	143	145	147	150	152	154
07	129	131	133	135	138	140	142	144	146	148	150
08	126	128	130	132	134	136	139	141	143	145	147
09	123	125	127	129	131	133	135	137	139	141	143
0.60	120	122	124	126	128	130	132	134	136	138	140
11	117	119	121	123	125	127	129	131	133	135	136
12	114	116	118	120	122	123	125	127	129	131	133
13	111	113	115	117	118	120	122	124	126	128	129
14	108	110	112	113	115	117	119	121	122	124	126
15	105	107	108	110	112	114	115	117	119	121	122
16	102	104	105	107	109	110	112	114	116	117	119
17	99	101	102	104	106	107	109	111	112	114	115
18	96	98	99	101	102	104	106	107	109	110	112
19	93	95	96	98	99	101	102	104	105	107	108
0.70	90	91	93	94	96	97	99	100	102	103	105
21	87	88	90	91	93	94	96	97	99	100	101
22	84	85	87	88	90	91	92	94	95	97	98
23	81	82	84	85	86	88	89	90	92	93	94
24	78	79	81	82	83	84	86	87	88	90	91
25	75	76	77	79	80	81	82	84	85	86	87
26	72	73	74	76	77	78	79	80	82	83	84
27	69	70	71	72	74	75	76	77	78	79	80
28	66	67	68	69	70	71	73	74	75	76	77
29	63	64	65	66	67	68	69	70	71	72	73
0.80	60	61	62	63	64	65	66	67	68	69	70
31	57	58	59	60	61	62	63	64	65	66	66
32	54	55	56	57	58	58	59	60	61	62	63
33	51	52	53	54	54	55	56	57	58	59	59
34	48	49	50	50	51	52	53	54	54	55	56
35	45	46	46	47	48	49	49	50	51	52	52
36	42	43	43	44	45	45	46	47	48	48	49
37	39	40	40	41	42	42	43	44	44	45	45
38	36	37	37	38	38	39	40	40	41	41	42
39	33	34	34	35	35	36	36	37	37	38	38
0.90	30	30	31	31	32	32	33	33	34	34	35
41	27	27	28	28	29	29	30	30	31	31	31
42	24	24	25	25	26	26	26	27	27	28	28
43	21	21	22	22	22	23	23	23	24	24	24
44	18	18	19	19	19	19	20	20	20	21	21
45	15	15	15	16	16	16	16	17	17	17	17
46	12	12	12	13	13	13	13	13	14	14	14
47	9	9	9	9	10	10	10	10	10	10	10
48	6	6	6	6	6	6	7	7	7	7	7
49	3	3	3	3	3	3	3	3	3	3	3
1.00	0	0	0	0	0	0	0	0	0	0	0

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	700	710	720	730	740	750	760	770	780	790	800
0.00	350	355	360	365	370	375	380	385	390	395	400
01	346	351	356	361	366	371	376	381	386	391	396
02	343	348	353	358	363	367	372	377	382	387	392
03	339	344	349	354	359	364	369	373	378	383	388
04	336	341	346	350	355	360	365	370	374	379	384
05	332	337	342	347	351	356	361	366	370	375	380
06	329	334	338	343	348	352	357	362	367	371	376
07	325	330	335	339	344	349	353	358	363	367	372
08	322	327	331	336	340	345	350	354	359	363	368
09	318	323	328	332	337	341	346	350	355	359	364
0.10	315	319	324	328	333	337	342	346	351	355	360
11	311	316	320	325	329	334	338	343	347	352	356
12	308	312	317	321	326	330	334	339	343	348	352
13	304	309	313	318	322	326	331	335	339	344	348
14	301	305	310	314	318	322	327	331	335	340	344
15	297	302	306	310	314	319	323	327	331	336	340
16	294	298	302	307	311	315	319	323	328	332	336
17	290	295	299	303	307	311	315	320	324	328	332
18	287	291	295	299	303	307	312	316	320	324	328
19	283	288	292	296	300	304	308	312	316	320	324
0.20	280	284	288	292	296	300	304	308	312	316	320
21	276	280	284	288	292	296	300	304	308	312	316
22	273	277	281	285	289	292	296	300	304	308	312
23	269	273	277	281	285	289	293	296	300	304	308
24	266	270	274	277	281	285	289	293	296	300	304
25	262	266	270	274	277	281	285	289	292	296	300
26	259	263	266	270	274	277	281	285	289	292	296
27	255	259	263	266	270	274	277	281	285	288	292
28	252	256	259	263	266	270	274	277	281	284	288
29	248	252	256	259	263	266	270	273	277	280	284
0.30	245	248	252	255	259	262	266	269	273	276	280
31	241	245	248	252	255	259	262	266	269	273	276
32	238	241	245	248	252	255	258	262	265	269	272
33	234	238	241	245	248	251	255	258	261	265	268
34	231	234	238	241	244	247	251	254	257	261	264
35	227	231	234	237	240	244	247	250	253	257	260
36	224	227	230	234	237	240	243	246	250	253	256
37	220	224	227	230	233	236	239	243	246	249	252
38	217	220	223	226	229	232	236	239	242	245	248
39	213	217	220	223	226	229	232	235	238	241	244
0.40	210	213	216	219	222	225	228	231	234	237	240
41	206	209	212	215	218	221	224	227	230	233	236
42	203	206	209	212	215	217	220	223	226	229	232
43	199	202	205	208	211	214	217	219	222	225	228
44	196	199	202	204	207	210	213	216	218	221	224
45	192	195	198	201	203	206	209	212	214	217	220
46	189	192	194	197	200	202	205	208	211	213	216
47	185	188	191	193	196	199	201	204	207	209	212
48	182	185	187	190	192	195	198	200	203	205	208
49	178	181	184	186	189	191	194	196	199	201	204
0.50	175	177	180	182	185	187	190	192	195	197	200

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	700	710	720	730	740	750	760	770	780	790	800
0.50	175	177	180	182	185	187	190	192	195	197	200
01	171	174	176	179	181	184	186	189	191	194	196
02	168	170	173	175	178	180	182	185	187	190	192
03	164	167	169	172	174	176	179	181	183	186	188
04	161	163	166	168	170	172	175	177	179	182	184
05	157	160	162	164	166	169	171	173	175	178	180
06	154	156	158	161	163	165	167	169	172	174	176
07	150	153	155	157	159	161	163	166	168	170	172
08	147	149	151	153	155	157	160	162	164	166	168
09	143	146	148	150	152	154	156	158	160	162	164
0.60	140	142	144	146	148	150	152	154	156	158	160
11	136	138	140	142	144	146	148	150	152	154	156
12	133	135	137	139	141	142	144	146	148	150	152
13	129	131	133	135	137	139	141	142	144	146	148
14	126	128	130	131	133	135	137	139	140	142	144
15	122	124	126	128	129	131	133	135	136	138	140
16	119	121	122	124	126	127	129	131	133	134	136
17	115	117	119	120	122	124	125	127	129	130	132
18	112	114	115	117	118	120	122	123	125	126	128
19	108	110	112	113	115	116	118	119	121	122	124
0.70	105	106	108	109	111	112	114	115	117	118	120
21	101	103	104	106	107	109	110	112	113	115	116
22	98	99	101	102	104	105	106	108	109	111	112
23	94	96	97	99	100	101	103	104	105	107	108
24	91	92	94	95	96	97	99	100	101	103	104
25	87	89	90	91	92	94	95	96	97	99	100
26	84	85	86	88	89	90	91	92	94	95	96
27	80	82	83	84	85	86	87	89	90	91	92
28	77	78	79	80	81	82	84	85	86	87	88
29	73	75	76	77	78	79	80	81	82	83	84
0.80	70	71	72	73	74	75	76	77	78	79	80
31	66	67	68	69	70	71	72	73	74	75	76
32	63	64	65	66	67	67	68	69	70	71	72
33	59	60	61	62	63	64	65	65	66	67	68
34	56	57	58	58	59	60	61	62	62	63	64
35	52	53	54	55	55	56	57	58	58	59	60
36	49	50	50	51	52	52	53	54	55	55	56
37	45	46	47	47	48	49	49	50	51	51	52
38	42	43	43	44	44	45	46	46	47	47	48
39	38	39	40	40	41	41	42	42	43	43	44
0.90	35	35	36	36	37	37	38	38	39	39	40
41	31	32	32	33	33	34	34	35	35	36	36
42	28	28	29	29	30	30	30	31	31	32	32
43	24	25	25	26	26	26	27	27	27	28	28
44	21	21	22	22	22	22	23	23	23	24	24
45	17	18	18	18	18	19	19	19	19	20	20
46	14	14	14	15	15	15	15	15	16	16	16
47	10	11	11	11	11	11	11	12	12	12	12
48	7	7	7	7	7	7	8	8	8	8	8
49	3	4	4	4	4	4	4	4	4	4	4
1.00	0	0	0	0	0	0	0	0	0	0	0

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	800	810	820	830	840	850	860	870	880	890	900
0.00	400	405	410	415	420	425	430	435	440	445	450
01	396	401	406	411	416	421	426	431	436	441	445
02	392	397	402	407	412	416	421	426	431	436	441
03	388	393	398	403	407	412	417	422	427	432	436
04	384	389	394	398	403	408	413	418	422	427	432
05	380	385	389	394	399	404	408	413	418	423	427
06	376	381	385	390	395	399	404	409	414	418	423
07	372	377	381	386	391	395	400	405	409	414	418
08	368	373	377	382	386	391	396	400	405	409	414
09	364	369	373	378	382	387	391	396	400	405	409
0.10	360	364	369	373	378	382	387	391	396	400	405
11	356	360	365	369	374	378	383	387	392	396	400
12	352	356	361	365	370	374	378	383	387	392	396
13	348	352	357	361	365	370	374	378	383	387	391
14	344	348	353	357	361	365	370	374	378	383	387
15	340	344	348	353	357	361	365	370	374	378	382
16	336	340	344	349	353	357	361	365	370	374	378
17	332	336	340	344	349	353	357	361	365	369	373
18	328	332	336	340	344	348	353	357	361	365	369
19	324	328	332	336	340	344	348	352	356	360	364
0.20	320	324	328	332	336	340	344	348	352	356	360
21	316	320	324	328	332	336	340	344	348	352	355
22	312	316	320	324	328	331	335	339	343	347	351
23	308	312	316	320	323	327	331	335	339	343	346
24	304	308	312	315	319	323	327	331	334	338	342
25	300	304	307	311	315	319	322	326	330	334	337
26	296	300	303	307	311	314	318	322	326	329	333
27	292	296	299	303	307	310	314	318	321	325	328
28	288	292	295	299	302	306	310	313	317	320	324
29	284	288	291	295	298	302	305	309	312	316	319
0.30	280	283	287	290	294	297	301	304	308	311	315
31	276	279	283	286	290	293	297	300	304	307	310
32	272	275	279	282	286	289	292	296	299	303	306
33	268	271	275	278	281	285	288	291	295	298	301
34	264	267	271	274	277	280	284	287	290	294	297
35	260	263	266	270	273	276	279	283	286	289	292
36	256	259	262	266	269	272	275	278	282	285	288
37	252	255	258	261	265	268	271	274	277	280	283
38	248	251	254	257	260	263	267	270	273	276	279
39	244	247	250	253	256	259	262	265	268	271	274
0.40	240	243	246	249	252	255	258	261	264	267	270
41	236	239	242	245	248	251	254	257	260	263	265
42	232	235	238	241	244	246	249	252	255	258	261
43	228	231	234	237	239	242	245	248	251	254	256
44	224	227	230	232	235	238	241	244	246	249	252
45	220	223	225	228	231	234	236	239	242	245	247
46	216	219	221	224	227	229	232	235	238	240	243
47	212	215	217	220	223	225	228	231	233	236	238
48	208	211	213	216	218	221	224	226	229	231	234
49	204	207	209	212	214	217	219	222	224	227	229
0.50	200	202	205	207	210	212	215	217	220	222	225

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	800	810	820	830	840	850	860	870	880	890	900
0.50	200	202	205	207	210	212	215	217	220	222	225
01	196	198	201	203	206	208	211	213	216	218	220
02	192	194	197	199	202	204	206	209	211	214	216
03	188	190	193	195	197	200	202	204	207	209	211
04	184	186	189	191	193	195	198	200	202	205	207
05	180	182	184	187	189	191	193	196	198	200	202
06	176	178	180	183	185	187	189	191	194	196	198
07	172	174	176	178	181	183	185	187	189	191	193
08	168	170	172	174	176	178	181	183	185	187	189
09	164	166	168	170	172	174	176	178	180	182	184
0.60	160	162	164	166	168	170	172	174	176	178	180
11	156	158	160	162	164	166	168	170	172	174	175
12	152	154	156	158	160	161	163	165	167	169	171
13	148	150	152	154	155	157	159	161	163	165	166
14	144	146	148	149	151	153	155	157	158	160	162
15	140	142	143	145	147	149	150	152	154	156	157
16	136	138	139	141	143	144	146	148	150	151	153
17	132	134	135	137	139	140	142	144	145	147	148
18	128	130	131	133	134	136	138	139	141	142	144
19	124	126	127	129	130	132	133	135	136	138	139
0.70	120	121	123	124	126	127	129	130	132	133	135
21	116	117	119	120	122	123	125	126	128	129	130
22	112	113	115	116	118	119	120	122	123	125	126
23	108	109	111	112	113	115	116	117	119	120	121
24	104	105	107	108	109	110	112	113	114	116	117
25	100	101	102	104	105	106	107	109	110	111	112
26	96	97	98	100	101	102	103	104	106	107	108
27	92	93	94	95	97	98	99	100	101	102	103
28	88	89	90	91	92	93	95	96	97	98	99
29	84	85	86	87	88	89	90	91	92	93	94
0.80	80	81	82	83	84	85	86	87	88	89	90
31	76	77	78	79	80	81	82	83	84	85	85
32	72	73	74	75	76	76	77	78	79	80	81
33	68	69	70	71	71	72	73	74	75	76	76
34	64	65	66	66	67	68	69	70	70	71	72
35	60	61	61	62	63	64	64	65	66	67	67
36	56	57	57	58	59	59	60	61	62	62	63
37	52	53	53	54	55	55	56	57	57	58	58
38	48	49	49	50	50	51	52	52	53	53	54
39	44	45	45	46	46	47	47	48	48	49	49
0.90	40	40	41	41	42	42	43	43	44	44	45
41	36	36	37	37	38	38	39	39	40	40	40
42	32	32	33	33	34	34	34	35	35	36	36
43	28	28	29	29	29	30	30	30	31	31	31
44	24	24	25	25	25	25	26	26	26	27	27
45	20	20	20	21	21	21	21	22	22	22	22
46	16	16	16	17	17	17	17	17	18	18	18
47	12	12	12	12	13	13	13	13	13	13	13
48	8	8	8	8	8	8	9	9	9	9	9
49	4	4	4	4	4	4	4	4	4	4	4
1.00	0	0	0	0	0	0	0	0	0	0	0

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	900	910	920	930	940	950	960	970	980	990	1000
0.00	450	455	460	465	470	475	480	485	490	495	500
01	445	450	455	460	465	470	475	480	485	490	495
02	441	446	451	456	461	465	470	475	480	485	490
03	436	441	446	451	456	461	466	470	475	480	485
04	432	437	442	446	451	456	461	466	470	475	480
05	427	432	437	442	446	451	456	461	465	470	475
06	423	428	432	437	442	446	451	456	461	465	470
07	418	423	428	432	437	442	446	451	456	460	465
08	414	419	423	428	432	437	442	446	451	455	460
09	409	414	419	423	428	432	437	441	446	450	455
0.10	405	409	414	418	423	427	432	436	441	445	450
11	400	405	409	414	418	423	427	432	436	441	445
12	396	400	405	409	414	418	422	427	431	436	440
13	391	396	400	405	409	413	418	422	426	431	435
14	387	391	396	400	404	408	413	417	421	426	430
15	382	387	391	395	399	404	408	412	416	421	425
16	378	382	386	391	395	399	403	407	412	416	420
17	373	378	382	386	390	394	398	403	407	411	415
18	369	373	377	381	385	389	394	398	402	406	410
19	364	369	373	377	381	385	389	393	397	401	405
0.20	360	364	368	372	376	380	384	388	392	396	400
21	355	359	363	367	371	375	379	383	387	391	395
22	351	355	359	363	367	370	374	378	382	386	390
23	346	350	354	358	362	366	370	373	377	381	385
24	342	346	350	353	357	361	365	369	372	376	380
25	337	341	345	349	352	356	360	364	367	371	375
26	333	337	340	344	348	351	355	359	363	366	370
27	328	332	336	339	343	347	350	354	358	361	365
28	324	328	331	335	338	342	346	349	353	356	360
29	319	323	327	330	334	337	341	344	348	351	355
0.30	315	318	322	325	329	332	336	339	343	346	350
31	310	314	317	321	324	328	331	335	338	342	345
32	306	309	313	316	320	323	326	330	333	337	340
33	301	305	308	312	315	318	322	325	328	332	335
34	297	300	304	307	310	313	317	320	323	327	330
35	292	296	299	302	305	309	312	315	318	322	325
36	288	291	294	298	301	304	307	310	314	317	320
37	283	287	290	293	296	299	302	306	309	312	315
38	279	282	285	288	291	294	298	301	304	307	310
39	274	278	281	284	287	290	293	296	299	302	305
0.40	270	273	276	279	282	285	288	291	294	297	300
41	265	268	271	274	277	280	283	286	289	292	295
42	261	264	267	270	273	275	278	281	284	287	290
43	256	259	262	265	268	271	274	276	279	282	285
44	252	255	258	260	263	266	269	272	274	277	280
45	247	250	253	256	258	261	264	267	269	272	275
46	243	246	248	251	254	256	259	262	265	267	270
47	238	241	244	246	249	252	254	257	260	262	265
48	234	237	239	242	244	247	250	252	255	257	260
49	229	232	235	237	240	242	245	247	250	252	255
0.50	225	227	230	232	235	237	240	242	245	247	250

Verbesserung der ersten Differenz

Phase	Zweite Differenz										
	900	910	920	930	940	950	960	970	980	990	1000
0.50	225	227	230	232	235	237	240	242	245	247	250
01	220	223	225	228	230	233	235	238	240	243	245
02	216	218	221	223	226	228	230	233	235	238	240
03	211	214	216	219	221	223	226	228	230	233	235
04	207	209	212	214	216	218	221	223	225	228	230
05	202	205	207	209	211	214	216	218	220	223	225
06	198	200	202	205	207	209	211	213	216	218	220
07	193	196	198	200	202	204	206	209	211	213	215
08	189	191	193	195	197	199	202	204	206	208	210
09	184	187	189	191	193	195	197	199	201	203	205
0.60	180	182	184	186	188	190	192	194	196	198	200
11	175	177	179	181	183	185	187	189	191	193	195
12	171	173	175	177	179	180	182	184	186	188	190
13	166	168	170	172	174	176	178	179	181	183	185
14	162	164	166	167	169	171	173	175	176	178	180
15	157	159	161	163	164	166	168	170	171	173	175
16	153	155	156	158	160	161	163	165	167	168	170
17	148	150	152	153	155	157	158	160	162	163	165
18	144	146	147	149	150	152	154	155	157	158	160
19	139	141	143	144	146	147	149	150	152	153	155
0.70	135	136	138	139	141	142	144	145	147	148	150
21	130	132	133	135	136	138	139	141	142	144	145
22	126	127	129	130	132	133	134	136	137	139	140
23	121	123	124	126	127	128	130	131	132	134	135
24	117	118	120	121	122	123	125	126	127	129	130
25	112	114	115	116	117	119	120	121	122	124	125
26	108	109	110	112	113	114	115	116	118	119	120
27	103	105	106	107	108	109	110	112	113	114	115
28	99	100	101	102	103	104	106	107	108	109	110
29	94	96	97	98	99	100	101	102	103	104	105
0.80	90	91	92	93	94	95	96	97	98	99	100
31	85	86	87	88	89	90	91	92	93	94	95
32	81	82	83	84	85	85	86	87	88	89	90
33	76	77	78	79	80	81	82	82	83	84	85
34	72	73	74	74	75	76	77	78	78	79	80
35	67	68	69	70	70	71	72	73	73	74	75
36	63	64	64	65	66	66	67	68	69	69	70
37	58	59	60	60	61	62	62	63	64	64	65
38	54	55	55	56	56	57	58	58	59	59	60
39	49	50	51	51	52	52	53	53	54	54	55
0.90	45	45	46	46	47	47	48	48	49	49	50
41	40	41	41	42	42	43	43	44	44	45	45
42	36	36	37	37	38	38	38	39	39	40	40
43	31	32	32	33	33	33	34	34	34	35	35
44	27	27	28	28	28	28	29	29	29	30	30
45	22	23	23	23	23	24	24	24	24	25	25
46	18	18	18	19	19	19	19	19	20	20	20
47	13	14	14	14	14	14	14	15	15	15	15
48	9	9	9	9	9	9	10	10	10	10	10
49	4	5	5	5	5	5	5	5	5	5	5
1.00	0	0	0	0	0	0	0	0	0	0	0

$\mathbf{0}^\circ.000 - \mathbf{0}^\circ.050$ $\qquad$ $\mathbf{0}^\circ.050 - \mathbf{0}^\circ.100$

$\mathbf{0}^\circ$	S	d	T	d	$\mathbf{0}^\circ$	S	d	T	d
.000	8.241 877 3676	0	8.241 877 3676	0	.050	8.241 877 3125	23	8.241 877 4778	45
001	8.241 877 3676	1	8.241 877 3676	2	051	8.241 877 3102	22	8.241 877 4823	45
002	8.241 877 3675	1	8.241 877 3678	2	052	8.241 877 3080	23	8.241 877 4868	47
003	8.241 877 3674	2	8.241 877 3680	3	053	8.241 877 3057	24	8.241 877 4915	47
004	8.241 877 3672	2	8.241 877 3683	4	054	8.241 877 3033	24	8.241 877 4962	48
005	8.241 877 3670	2	8.241 877 3687	5	055	8.241 877 3009	25	8.241 877 5010	49
006	8.241 877 3668	3	8.241 877 3692	6	056	8.241 877 2984	24	8.241 877 5059	50
007	8.241 877 3665	3	8.241 877 3698	6	057	8.241 877 2960	26	8.241 877 5109	50
008	8.241 877 3662	4	8.241 877 3704	8	058	8.241 877 2934	26	8.241 877 5159	52
009	8.241 877 3658	4	8.241 877 3712	8	059	8.241 877 2908	26	8.241 877 5211	52
.010	8.241 877 3654	5	8.241 877 3720	9	.060	8.241 877 2882	27	8.241 877 5263	54
011	8.241 877 3649	5	8.241 877 3729	10	061	8.241 877 2855	27	8.241 877 5317	54
012	8.241 877 3644	5	8.241 877 3739	11	062	8.241 877 2828	27	8.241 877 5371	55
013	8.241 877 3639	6	8.241 877 3750	12	063	8.241 877 2801	28	8.241 877 5426	56
014	8.241 877 3633	7	8.241 877 3762	13	064	8.241 877 2773	29	8.241 877 5482	57
015	8.241 877 3626	7	8.241 877 3775	14	065	8.241 877 2744	29	8.241 877 5539	58
016	8.241 877 3619	7	8.241 877 3789	14	066	8.241 877 2715	29	8.241 877 5597	58
017	8.241 877 3612	8	8.241 877 3803	16	067	8.241 877 2686	30	8.241 877 5655	60
018	8.241 877 3604	8	8.241 877 3819	16	068	8.241 877 2656	30	8.241 877 5715	60
019	8.241 877 3596	8	8.241 877 3835	17	069	8.241 877 2626	30	8.241 877 5775	62
.020	8.241 877 3588	9	8.241 877 3852	18	.070	8.241 877 2596	32	8.241 877 5837	62
021	8.241 877 3579	10	8.241 877 3870	19	071	8.241 877 2564	31	8.241 877 5899	63
022	8.241 877 3569	10	8.241 877 3889	20	072	8.241 877 2533	32	8.241 877 5962	64
023	8.241 877 3559	10	8.241 877 3909	21	073	8.241 877 2501	32	8.241 877 6026	65
024	8.241 877 3549	11	8.241 877 3930	22	074	8.241 877 2469	33	8.241 877 6091	65
025	8.241 877 3538	11	8.241 877 3952	22	075	8.241 877 2436	34	8.241 877 6156	67
026	8.241 877 3527	12	8.241 877 3974	23	076	8.241 877 2402	33	8.241 877 6223	67
027	8.241 877 3515	12	8.241 877 3997	25	077	8.241 877 2369	35	8.241 877 6290	69
028	8.241 877 3503	13	8.241 877 4022	25	078	8.241 877 2334	34	8.241 877 6359	69
029	8.241 877 3490	13	8.241 877 4047	26	079	8.241 877 2300	35	8.241 877 6428	70
.030	8.241 877 3477	13	8.241 877 4073	27	.080	8.241 877 2265	36	8.241 877 6498	71
031	8.241 877 3464	14	8.241 877 4100	27	081	8.241 877 2229	36	8.241 877 6569	72
032	8.241 877 3450	14	8.241 877 4127	29	082	8.241 877 2193	36	8.241 877 6641	73
033	8.241 877 3436	15	8.241 877 4156	30	083	8.241 877 2157	37	8.241 877 6714	73
034	8.241 877 3421	15	8.241 877 4186	30	084	8.241 877 2120	37	8.241 877 6787	75
035	8.241 877 3406	16	8.241 877 4216	31	085	8.241 877 2083	38	8.241 877 6862	75
036	8.241 877 3390	16	8.241 877 4247	33	086	8.241 877 2045	38	8.241 877 6937	77
037	8.241 877 3374	16	8.241 877 4280	33	087	8.241 877 2007	39	8.241 877 7014	77
038	8.241 877 3358	17	8.241 877 4313	34	088	8.241 877 1968	39	8.241 877 7091	78
039	8.241 877 3341	18	8.241 877 4347	34	089	8.241 877 1929	39	8.241 877 7169	79
.040	8.241 877 3323	18	8.241 877 4381	36	.090	8.241 877 1890	40	8.241 877 7248	80
041	8.241 877 3305	18	8.241 877 4417	37	091	8.241 877 1850	40	8.241 877 7328	80
042	8.241 877 3287	19	8.241 877 4454	37	092	8.241 877 1810	41	8.241 877 7408	82
043	8.241 877 3268	19	8.241 877 4491	39	093	8.241 877 1769	41	8.241 877 7490	82
044	8.241 877 3249	20	8.241 877 4530	39	094	8.241 877 1728	42	8.241 877 7572	84
045	8.241 877 3229	20	8.241 877 4569	40	095	8.241 877 1686	42	8.241 877 7656	84
046	8.241 877 3209	20	8.241 877 4609	41	096	8.241 877 1644	43	8.241 877 7740	85
047	8.241 877 3189	21	8.241 877 4650	42	097	8.241 877 1601	43	8.241 877 7825	86
048	8.241 877 3168	21	8.241 877 4692	43	098	8.241 877 1558	43	8.241 877 7911	87
049	8.241 877 3147	22	8.241 877 4735	43	099	8.241 877 1515	44	8.241 877 7998	88
.050	8.241 877 3125		8.241 877 4778		.100	8.241 877 1471		8.241 877 8086	
	S	d	T	d		S	d	T	d

0°.100 — 0°.150

0°	S	d	T	d
.100	8.241 877 1471	44	8.241 877 8086	88
101	8.241 877 1427	45	8.241 877 8174	90
102	8.241 877 1382	45	8.241 877 8264	90
103	8.241 877 1337	46	8.241 877 8354	92
104	8.241 877 1291	46	8.241 877 8446	92
105	8.241 877 1245	47	8.241 877 8538	93
106	8.241 877 1198	46	8.241 877 8631	94
107	8.241 877 1152	48	8.241 877 8725	94
108	8.241 877 1104	48	8.241 877 8819	96
109	8.241 877 1056	48	8.241 877 8915	97
.110	8.241 877 1008	49	8.241 877 9012	97
111	8.241 877 0959	49	8.241 877 9109	99
112	8.241 877 0910	50	8.241 877 9208	99
113	8.241 877 0860	50	8.241 877 9307	100
114	8.241 877 0810	50	8.241 877 9407	101
115	8.241 877 0760	51	8.241 877 9508	102
116	8.241 877 0709	51	8.241 877 9610	102
117	8.241 877 0658	52	8.241 877 9712	104
118	8.241 877 0606	52	8.241 877 9816	105
119	8.241 877 0554	53	8.241 877 9921	105
.120	8.241 877 0501	53	8.241 878 0026	106
121	8.241 877 0448	54	8.241 878 0132	107
122	8.241 877 0394	54	8.241 878 0239	108
123	8.241 877 0340	54	8.241 878 0347	109
124	8.241 877 0286	55	8.241 878 0456	110
125	8.241 877 0231	56	8.241 878 0566	111
126	8.241 877 0175	55	8.241 878 0677	111
127	8.241 877 0120	57	8.241 878 0788	113
128	8.241 877 0063	56	8.241 878 0901	113
129	8.241 877 0007	57	8.241 878 1014	114
.130	8.241 876 9950	58	8.241 878 1128	116
131	8.241 876 9892	58	8.241 878 1244	116
132	8.241 876 9834	58	8.241 878 1360	116
133	8.241 876 9776	59	8.241 878 1476	118
134	8.241 876 9717	60	8.241 878 1594	119
135	8.241 876 9657	59	8.241 878 1713	119
136	8.241 876 9598	60	8.241 878 1832	121
137	8.241 876 9538	61	8.241 878 1953	121
138	8.241 876 9477	61	8.241 878 2074	122
139	8.241 876 9416	62	8.241 878 2196	123
.140	8.241 876 9354	62	8.241 878 2319	124
141	8.241 876 9292	62	8.241 878 2443	125
142	8.241 876 9230	63	8.241 878 2568	125
143	8.241 876 9167	63	8.241 878 2693	127
144	8.241 876 9104	64	8.241 878 2820	128
145	8.241 876 9040	64	8.241 878 2948	128
146	8.241 876 8976	65	8.241 878 3076	129
147	8.241 876 8911	65	8.241 878 3205	130
148	8.241 876 8846	65	8.241 878 3335	131
149	8.241 876 8781	66	8.241 878 3466	132
.150	8.241 876 8715		8.241 878 3598	
	S	d	T	d

0°.150 — 0°.200

0°	S	d	T	d
.150	8.241 876 8715	66	8.241 878 3598	133
151	8.241 876 8649	67	8.241 878 3731	133
152	8.241 876 8582	68	8.241 878 3864	135
153	8.241 876 8514	67	8.241 878 3999	135
154	8.241 876 8447	68	8.241 878 4134	136
155	8.241 876 8379	69	8.241 878 4270	138
156	8.241 876 8310	69	8.241 878 4408	138
157	8.241 876 8241	69	8.241 878 4546	139
158	8.241 876 8172	70	8.241 878 4685	139
159	8.241 876 8102	71	8.241 878 4824	141
.160	8.241 876 8031	70	8.241 878 4965	142
161	8.241 876 7961	72	8.241 878 5107	142
162	8.241 876 7889	71	8.241 878 5249	143
163	8.241 876 7818	72	8.241 878 5392	144
164	8.241 876 7746	73	8.241 878 5536	146
165	8.241 876 7673	73	8.241 878 5682	146
166	8.241 876 7600	73	8.241 878 5828	146
167	8.241 876 7527	74	8.241 878 5974	148
168	8.241 876 7453	74	8.241 878 6122	149
169	8.241 876 7379	75	8.241 878 6271	149
.170	8.241 876 7304	75	8.241 878 6420	151
171	8.241 876 7229	76	8.241 878 6571	151
172	8.241 876 7153	76	8.241 878 6722	152
173	8.241 876 7077	77	8.241 878 6874	153
174	8.241 876 7000	77	8.241 878 7027	154
175	8.241 876 6923	77	8.241 878 7181	155
176	8.241 876 6846	78	8.241 878 7336	155
177	8.241 876 6768	78	8.241 878 7491	157
178	8.241 876 6690	79	8.241 878 7648	157
179	8.241 876 6611	79	8.241 878 7805	159
.180	8.241 876 6532	80	8.241 878 7964	159
181	8.241 876 6452	80	8.241 878 8123	160
182	8.241 876 6372	80	8.241 878 8283	161
183	8.241 876 6292	81	8.241 878 8444	162
184	8.241 876 6211	81	8.241 878 8606	162
185	8.241 876 6130	82	8.241 878 8768	164
186	8.241 876 6048	82	8.241 878 8932	165
187	8.241 876 5966	83	8.241 878 9097	165
188	8.241 876 5883	83	8.241 878 9262	166
189	8.241 876 5800	84	8.241 878 9428	167
.190	8.241 876 5716	84	8.241 878 9595	168
191	8.241 876 5632	84	8.241 878 9763	169
192	8.241 876 5548	85	8.241 878 9932	170
193	8.241 876 5463	85	8.241 879 0102	171
194	8.241 876 5378	86	8.241 879 0273	171
195	8.241 876 5292	86	8.241 879 0444	173
196	8.241 876 5206	87	8.241 879 0617	173
197	8.241 876 5119	87	8.241 879 0790	174
198	8.241 876 5032	88	8.241 879 0964	175
199	8.241 876 4944	88	8.241 879 1139	176
.200	8.241 876 4856		8.241 879 1315	
	S	d	T	d

0°.200 — 0°.250

0°	S	d	T	d
.200	8.241 876 4856	88	8.241 879 1315	177
201	8.241 876 4768	89	8.241 879 1492	178
202	8.241 876 4679	89	8.241 879 1670	178
203	8.241 876 4590	90	8.241 879 1848	180
204	8.241 876 4500	90	8.241 879 2028	180
205	8.241 876 4410	91	8.241 879 2208	181
206	8.241 876 4319	91	8.241 879 2389	182
207	8.241 876 4228	91	8.241 879 2571	183
208	8.241 876 4137	92	8.241 879 2754	184
209	8.241 876 4045	93	8.241 879 2938	185
.210	8.241 876 3952	93	8.241 879 3123	186
211	8.241 876 3859	93	8.241 879 3309	186
212	8.241 876 3766	93	8.241 879 3495	188
213	8.241 876 3673	95	8.241 879 3683	188
214	8.241 876 3578	94	8.241 879 3871	189
215	8.241 876 3484	95	8.241 879 4060	190
216	8.241 876 3389	96	8.241 879 4250	191
217	8.241 876 3293	96	8.241 879 4441	192
218	8.241 876 3197	96	8.241 879 4633	193
219	8.241 876 3101	97	8.241 879 4826	193
.220	8.241 876 3004	97	8.241 879 5019	195
221	8.241 876 2907	98	8.241 879 5214	195
222	8.241 876 2809	98	8.241 879 5409	196
223	8.241 876 2711	98	8.241 879 5605	198
224	8.241 876 2613	99	8.241 879 5803	198
225	8.241 876 2514	100	8.241 879 6001	198
226	8.241 876 2414	100	8.241 879 6199	200
227	8.241 876 2314	100	8.241 879 6399	201
228	8.241 876 2214	101	8.241 879 6600	201
229	8.241 876 2113	101	8.241 879 6801	203
.230	8.241 876 2012	102	8.241 879 7004	203
231	8.241 876 1910	102	8.241 879 7207	204
232	8.241 876 1808	102	8.241 879 7411	205
233	8.241 876 1706	103	8.241 879 7616	206
234	8.241 876 1603	104	8.241 879 7822	207
235	8.241 876 1499	103	8.241 879 8029	208
236	8.241 876 1396	105	8.241 879 8237	208
237	8.241 876 1291	105	8.241 879 8445	210
238	8.241 876 1186	105	8.241 879 8655	210
239	8.241 876 1081	105	8.241 879 8865	211
.240	8.241 876 0976	106	8.241 879 9076	213
241	8.241 876 0870	107	8.241 879 9289	213
242	8.241 876 0763	107	8.241 879 9502	213
243	8.241 876 0656	107	8.241 879 9715	215
244	8.241 876 0549	108	8.241 879 9930	216
245	8.241 876 0441	108	8.241 880 0146	216
246	8.241 876 0333	109	8.241 880 0362	218
247	8.241 876 0224	109	8.241 880 0580	218
248	8.241 876 0115	110	8.241 880 0798	219
249	8.241 876 0005	110	8.241 880 1017	220
.250	8.241 875 9895		8.241 880 1237	
	S	d	T	d

0°.250 — 0°.300

0°	S	d	T	d
.250	8.241 875 9895	110	8.241 880 1237	221
251	8.241 875 9785	111	8.241 880 1458	222
252	8.241 875 9674	111	8.241 880 1680	223
253	8.241 875 9563	112	8.241 880 1903	223
254	8.241 875 9451	112	8.241 880 2126	225
255	8.241 875 9339	113	8.241 880 2351	225
256	8.241 875 9226	113	8.241 880 2576	226
257	8.241 875 9113	114	8.241 880 2802	227
258	8.241 875 8999	114	8.241 880 3029	228
259	8.241 875 8885	114	8.241 880 3257	229
.260	8.241 875 8771	115	8.241 880 3486	230
261	8.241 875 8656	115	8.241 880 3716	231
262	8.241 875 8541	116	8.241 880 3947	231
263	8.241 875 8425	116	8.241 880 4178	233
264	8.241 875 8309	117	8.241 880 4411	233
265	8.241 875 8192	117	8.241 880 4644	234
266	8.241 875 8075	118	8.241 880 4878	235
267	8.241 875 7957	118	8.241 880 5113	236
268	8.241 875 7839	118	8.241 880 5349	237
269	8.241 875 7721	119	8.241 880 5586	237
.270	8.241 875 7602	119	8.241 880 5823	239
271	8.241 875 7483	120	8.241 880 6062	239
272	8.241 875 7363	120	8.241 880 6301	241
273	8.241 875 7243	121	8.241 880 6542	241
274	8.241 875 7122	121	8.241 880 6783	242
275	8.241 875 7001	121	8.241 880 7025	243
276	8.241 875 6880	122	8.241 880 7268	244
277	8.241 875 6758	122	8.241 880 7512	245
278	8.241 875 6636	123	8.241 880 7757	245
279	8.241 875 6513	123	8.241 880 8002	247
.280	8.241 875 6390	124	8.241 880 8249	247
281	8.241 875 6266	124	8.241 880 8496	249
282	8.241 875 6142	125	8.241 880 8745	249
283	8.241 875 6017	125	8.241 880 8994	250
284	8.241 875 5892	125	8.241 880 9244	251
285	8.241 875 5767	126	8.241 880 9495	251
286	8.241 875 5641	127	8.241 880 9746	253
287	8.241 875 5514	126	8.241 880 9999	254
288	8.241 875 5388	128	8.241 881 0253	254
289	8.241 875 5260	127	8.241 881 0507	255
.290	8.241 875 5133	128	8.241 881 0762	257
291	8.241 875 5005	129	8.241 881 1019	257
292	8.241 875 4876	129	8.241 881 1276	258
293	8.241 875 4747	129	8.241 881 1534	259
294	8.241 875 4618	130	8.241 881 1793	259
295	8.241 875 4488	131	8.241 881 2052	261
296	8.241 875 4357	130	8.241 881 2313	261
297	8.241 875 4227	131	8.241 881 2574	263
298	8.241 875 4096	132	8.241 881 2837	263
299	8.241 875 3964	132	8.241 881 3100	264
.300	8.241 875 3832		8.241 881 3364	
	S	d	T	d

$\mathbf{0}^\circ.300 - \mathbf{0}^\circ.350$

$\mathbf{0}^\circ$	S	d	T	d
.300	8.241 875 3832	133	8.241 881 3364	265
301	8.241 875 3699	133	8.241 881 3629	266
302	8.241 875 3566	133	8.241 881 3895	267
303	8.241 875 3433	134	8.241 881 4162	268
304	8.241 875 3299	134	8.241 881 4430	268
305	8.241 875 3165	135	8.241 881 4698	270
306	8.241 875 3030	135	8.241 881 4968	270
307	8.241 875 2895	136	8.241 881 5238	271
308	8.241 875 2759	136	8.241 881 5509	272
309	8.241 875 2623	136	8.241 881 5781	273
.310	8.241 875 2487	137	8.241 881 6054	274
311	8.241 875 2350	137	8.241 881 6328	275
312	8.241 875 2213	138	8.241 881 6603	275
313	8.241 875 2075	138	8.241 881 6878	277
314	8.241 875 1937	139	8.241 881 7155	277
315	8.241 875 1798	139	8.241 881 7432	279
316	8.241 875 1659	140	8.241 881 7711	279
317	8.241 875 1519	140	8.241 881 7990	280
318	8.241 875 1379	140	8.241 881 8270	281
319	8.241 875 1239	141	8.241 881 8551	281
.320	8.241 875 1098	142	8.241 881 8832	283
321	8.241 875 0956	141	8.241 881 9115	284
322	8.241 875 0815	143	8.241 881 9399	284
323	8.241 875 0672	142	8.241 881 9683	285
324	8.241 875 0530	143	8.241 881 9968	287
325	8.241 875 0387	144	8.241 882 0255	287
326	8.241 875 0243	144	8.241 882 0542	288
327	8.241 875 0099	144	8.241 882 0830	289
328	8.241 874 9955	145	8.241 882 1119	289
329	8.241 874 9810	145	8.241 882 1408	291
.330	8.241 874 9665	146	8.241 882 1699	291
331	8.241 874 9519	146	8.241 882 1990	293
332	8.241 874 9373	147	8.241 882 2283	293
333	8.241 874 9226	147	8.241 882 2576	294
334	8.241 874 9079	148	8.241 882 2870	295
335	8.241 874 8931	147	8.241 882 3165	296
336	8.241 874 8784	149	8.241 882 3461	297
337	8.241 874 8635	149	8.241 882 3758	298
338	8.241 874 8486	149	8.241 882 4056	298
339	8.241 874 8337	150	8.241 882 4354	299
.340	8.241 874 8187	150	8.241 882 4653	301
341	8.241 874 8037	150	8.241 882 4954	301
342	8.241 874 7887	151	8.241 882 5255	302
343	8.241 874 7736	152	8.241 882 5557	303
344	8.241 874 7584	152	8.241 882 5860	304
345	8.241 874 7432	152	8.241 882 6164	305
346	8.241 874 7280	153	8.241 882 6469	305
347	8.241 874 7127	153	8.241 882 6774	307
348	8.241 874 6974	154	8.241 882 7081	307
349	8.241 874 6820	154	8.241 882 7388	308
.350	8.241 874 6666		8.241 882 7696	
	S	d	T	d

$\mathbf{0}^\circ.350 - \mathbf{0}^\circ.400$

$\mathbf{0}^\circ$	S	d	T	d
.350	8.241 874 6666	155	8.241 882 7696	309
351	8.241 874 6511	155	8.241 882 8005	310
352	8.241 874 6356	155	8.241 882 8315	311
353	8.241 874 6201	156	8.241 882 8626	312
354	8.241 874 6045	156	8.241 882 8938	313
355	8.241 874 5889	157	8.241 882 9251	313
356	8.241 874 5732	157	8.241 882 9564	315
357	8.241 874 5575	158	8.241 882 9879	315
358	8.241 874 5417	158	8.241 883 0194	316
359	8.241 874 5259	159	8.241 883 0510	317
.360	8.241 874 5100	159	8.241 883 0827	318
361	8.241 874 4941	159	8.241 883 1145	319
362	8.241 874 4782	160	8.241 883 1464	320
363	8.241 874 4622	160	8.241 883 1784	320
364	8.241 874 4462	161	8.241 883 2104	322
365	8.241 874 4301	161	8.241 883 2426	322
366	8.241 874 4140	162	8.241 883 2748	323
367	8.241 874 3978	162	8.241 883 3071	325
368	8.241 874 3816	162	8.241 883 3396	325
369	8.241 874 3654	163	8.241 883 3721	326
.370	8.241 874 3491	164	8.241 883 4047	326
371	8.241 874 3327	163	8.241 883 4373	328
372	8.241 874 3164	165	8.241 883 4701	328
373	8.241 874 2999	164	8.241 883 5029	330
374	8.241 874 2835	165	8.241 883 5359	330
375	8.241 874 2670	166	8.241 883 5689	331
376	8.241 874 2504	166	8.241 883 6020	332
377	8.241 874 2338	167	8.241 883 6352	333
378	8.241 874 2171	166	8.241 883 6685	334
379	8.241 874 2005	168	8.241 883 7019	335
.380	8.241 874 1837	168	8.241 883 7354	336
381	8.241 874 1669	168	8.241 883 7690	336
382	8.241 874 1501	169	8.241 883 8026	337
383	8.241 874 1332	169	8.241 883 8363	339
384	8.241 874 1163	169	8.241 883 8702	339
385	8.241 874 0994	170	8.241 883 9041	340
386	8.241 874 0824	171	8.241 883 9381	341
387	8.241 874 0653	171	8.241 883 9722	341
388	8.241 874 0482	171	8.241 884 0063	343
389	8.241 874 0311	172	8.241 884 0406	344
.390	8.241 874 0139	172	8.241 884 0750	344
391	8.241 873 9967	172	8.241 884 1094	345
392	8.241 873 9795	174	8.241 884 1439	346
393	8.241 873 9621	173	8.241 884 1785	347
394	8.241 873 9448	174	8.241 884 2132	348
395	8.241 873 9274	174	8.241 884 2480	349
396	8.241 873 9100	175	8.241 884 2829	350
397	8.241 873 8925	176	8.241 884 3179	351
398	8.241 873 8749	175	8.241 884 3530	351
399	8.241 873 8574	176	8.241 884 3881	352
.400	8.241 873 8398		8.241 884 4233	
	S	d	T	d

$\mathbf{0}^\circ.400 - \mathbf{0}^\circ.450$

$\mathbf{0}^\circ$	S	d	T	d
.400	8.241 873 8398	177	8.241 884 4233	354
401	8.241 873 8221	177	8.241 884 4587	354
402	8.241 873 8044	178	8.241 884 4941	355
403	8.241 873 7866	178	8.241 884 5296	356
404	8.241 873 7688	178	8.241 884 5652	356
405	8.241 873 7510	179	8.241 884 6008	358
406	8.241 873 7331	179	8.241 884 6366	358
407	8.241 873 7152	180	8.241 884 6724	360
408	8.241 873 6972	180	8.241 884 7084	360
409	8.241 873 6792	180	8.241 884 7444	361
.410	8.241 873 6612	181	8.241 884 7805	362
411	8.241 873 6431	182	8.241 884 8167	363
412	8.241 873 6249	182	8.241 884 8530	364
413	8.241 873 6067	182	8.241 884 8894	365
414	8.241 873 5885	183	8.241 884 9259	365
415	8.241 873 5702	183	8.241 884 9624	367
416	8.241 873 5519	184	8.241 884 9991	367
417	8.241 873 5335	184	8.241 885 0358	368
418	8.241 873 5151	185	8.241 885 0726	370
419	8.241 873 4966	184	8.241 885 1096	370
.420	8.241 873 4782	186	8.241 885 1466	370
421	8.241 873 4596	186	8.241 885 1836	372
422	8.241 873 4410	186	8.241 885 2208	373
423	8.241 873 4224	187	8.241 885 2581	373
424	8.241 873 4037	187	8.241 885 2954	375
425	8.241 873 3850	188	8.241 885 3329	375
426	8.241 873 3662	188	8.241 885 3704	376
427	8.241 873 3474	188	8.241 885 4080	377
428	8.241 873 3286	189	8.241 885 4457	378
429	8.241 873 3097	190	8.241 885 4835	379
.430	8.241 873 2907	190	8.241 885 5214	380
431	8.241 873 2717	190	8.241 885 5594	380
432	8.241 873 2527	191	8.241 885 5974	382
433	8.241 873 2336	191	8.241 885 6356	382
434	8.241 873 2145	191	8.241 885 6738	383
435	8.241 873 1954	192	8.241 885 7121	384
436	8.241 873 1762	193	8.241 885 7505	385
437	8.241 873 1569	193	8.241 885 7890	386
438	8.241 873 1376	193	8.241 885 8276	387
439	8.241 873 1183	194	8.241 885 8663	388
.440	8.241 873 0989	194	8.241 885 9051	388
441	8.241 873 0795	195	8.241 885 9439	390
442	8.241 873 0600	195	8.241 885 9829	390
443	8.241 873 0405	196	8.241 886 0219	391
444	8.241 873 0209	196	8.241 886 0610	392
445	8.241 873 0013	196	8.241 886 1002	393
446	8.241 872 9817	197	8.241 886 1395	394
447	8.241 872 9620	197	8.241 886 1789	394
448	8.241 872 9423	198	8.241 886 2183	396
449	8.241 872 9225	198	8.241 886 2579	396
.450	8.241 872 9027		8.241 886 2975	
	S	d	T	d

$\mathbf{0}^\circ.450 - \mathbf{0}^\circ.500$

$\mathbf{0}^\circ$	S	d	T	d
.450	8.241 872 9027	199	8.241 886 2975	398
451	8.241 872 8828	199	8.241 886 3373	398
452	8.241 872 8629	200	8.241 886 3771	399
453	8.241 872 8429	200	8.241 886 4170	400
454	8.241 872 8229	200	8.241 886 4570	401
455	8.241 872 8029	201	8.241 886 4971	402
456	8.241 872 7828	201	8.241 886 5373	402
457	8.241 872 7627	202	8.241 886 5775	404
458	8.241 872 7425	202	8.241 886 6179	404
459	8.241 872 7223	203	8.241 886 6583	405
.460	8.241 872 7020	203	8.241 886 6988	407
461	8.241 872 6817	203	8.241 886 7395	407
462	8.241 872 6614	204	8.241 886 7802	408
463	8.241 872 6410	205	8.241 886 8210	408
464	8.241 872 6205	205	8.241 886 8618	410
465	8.241 872 6000	205	8.241 886 9028	411
466	8.241 872 5795	206	8.241 886 9439	411
467	8.241 872 5589	206	8.241 886 9850	412
468	8.241 872 5383	206	8.241 887 0262	414
469	8.241 872 5177	207	8.241 887 0676	414
.470	8.241 872 4970	208	8.241 887 1090	415
471	8.241 872 4762	208	8.241 887 1505	416
472	8.241 872 4554	208	8.241 887 1921	416
473	8.241 872 4346	209	8.241 887 2337	418
474	8.241 872 4137	209	8.241 887 2755	418
475	8.241 872 3928	210	8.241 887 3173	420
476	8.241 872 3718	210	8.241 887 3593	420
477	8.241 872 3508	211	8.241 887 4013	421
478	8.241 872 3297	211	8.241 887 4434	422
479	8.241 872 3086	211	8.241 887 4856	423
.480	8.241 872 2875	212	8.241 887 5279	424
481	8.241 872 2663	212	8.241 887 5703	425
482	8.241 872 2451	213	8.241 887 6128	425
483	8.241 872 2238	213	8.241 887 6553	427
484	8.241 872 2025	214	8.241 887 6980	427
485	8.241 872 1811	214	8.241 887 7407	428
486	8.241 872 1597	214	8.241 887 7835	429
487	8.241 872 1383	215	8.241 887 8264	430
488	8.241 872 1168	216	8.241 887 8694	431
489	8.241 872 0952	216	8.241 887 9125	432
.490	8.241 872 0736	216	8.241 887 9557	432
491	8.241 872 0520	217	8.241 887 9989	434
492	8.241 872 0303	217	8.241 888 0423	434
493	8.241 872 0086	218	8.241 888 0857	435
494	8.241 871 9868	218	8.241 888 1292	437
495	8.241 871 9650	218	8.241 888 1729	437
496	8.241 871 9432	219	8.241 888 2166	438
497	8.241 871 9213	219	8.241 888 2604	438
498	8.241 871 8994	220	8.241 888 3042	440
499	8.241 871 8774	221	8.241 888 3482	441
.500	8.241 871 8553		8.241 888 3923	
	S	d	T	d

$\mathbf{0}^\circ.500 - \mathbf{0}^\circ.550$

$\mathbf{0}^\circ$	S	d	T	d
.500	8.241 871 8553	220	8.241 888 3923	441
501	8.241 871 8333	221	8.241 888 4364	442
502	8.241 871 8112	222	8.241 888 4806	444
503	8.241 871 7890	222	8.241 888 5250	444
504	8.241 871 7668	223	8.241 888 5694	445
505	8.241 871 7445	222	8.241 888 6139	445
506	8.241 871 7223	224	8.241 888 6584	447
507	8.241 871 6999	224	8.241 888 7031	448
508	8.241 871 6775	224	8.241 888 7479	448
509	8.241 871 6551	225	8.241 888 7927	450
.510	8.241 871 6326	225	8.241 888 8377	450
511	8.241 871 6101	225	8.241 888 8827	451
512	8.241 871 5876	226	8.241 888 9278	452
513	8.241 871 5650	227	8.241 888 9730	453
514	8.241 871 5423	227	8.241 889 0183	454
515	8.241 871 5196	227	8.241 889 0637	454
516	8.241 871 4969	228	8.241 889 1091	456
517	8.241 871 4741	228	8.241 889 1547	456
518	8.241 871 4513	229	8.241 889 2003	458
519	8.241 871 4284	229	8.241 889 2461	458
.520	8.241 871 4055	229	8.241 889 2919	459
521	8.241 871 3826	230	8.241 889 3378	460
522	8.241 871 3596	231	8.241 889 3838	461
523	8.241 871 3365	230	8.241 889 4299	461
524	8.241 871 3135	232	8.241 889 4760	463
525	8.241 871 2903	231	8.241 889 5223	464
526	8.241 871 2672	233	8.241 889 5687	464
527	8.241 871 2439	232	8.241 889 6151	465
528	8.241 871 2207	233	8.241 889 6616	466
529	8.241 871 1974	234	8.241 889 7082	467
.530	8.241 871 1740	234	8.241 889 7549	468
531	8.241 871 1506	234	8.241 889 8017	469
532	8.241 871 1272	235	8.241 889 8486	470
533	8.241 871 1037	235	8.241 889 8956	470
534	8.241 871 0802	236	8.241 889 9426	472
535	8.241 871 0566	236	8.241 889 9898	472
536	8.241 871 0330	237	8.241 890 0370	473
537	8.241 871 0093	237	8.241 890 0843	474
538	8.241 870 9856	237	8.241 890 1317	475
539	8.241 870 9619	238	8.241 890 1792	476
.540	8.241 870 9381	238	8.241 890 2268	477
541	8.241 870 9143	239	8.241 890 2745	477
542	8.241 870 8904	239	8.241 890 3222	479
543	8.241 870 8665	240	8.241 890 3701	479
544	8.241 870 8425	240	8.241 890 4180	480
545	8.241 870 8185	241	8.241 890 4660	482
546	8.241 870 7944	241	8.241 890 5142	482
547	8.241 870 7703	241	8.241 890 5624	482
548	8.241 870 7462	242	8.241 890 6106	484
549	8.241 870 7220	242	8.241 890 6590	485
.550	8.241 870 6978		8.241 890 7075	
	S	d	T	d

$\mathbf{0}^\circ.550 - \mathbf{0}^\circ.600$

$\mathbf{0}^\circ$	S	d	T	d
.550	8.241 870 6978	243	8.241 890 7075	485
551	8.241 870 6735	243	8.241 890 7560	487
552	8.241 870 6492	244	8.241 890 8047	487
553	8.241 870 6248	244	8.241 890 8534	488
554	8.241 870 6004	245	8.241 890 9022	489
555	8.241 870 5759	245	8.241 890 9511	490
556	8.241 870 5514	245	8.241 891 0001	491
557	8.241 870 5269	246	8.241 891 0492	492
558	8.241 870 5023	246	8.241 891 0984	492
559	8.241 870 4777	247	8.241 891 1476	494
.560	8.241 870 4530	247	8.241 891 1970	494
561	8.241 870 4283	248	8.241 891 2464	496
562	8.241 870 4035	248	8.241 891 2960	496
563	8.241 870 3787	248	8.241 891 3456	497
564	8.241 870 3539	249	8.241 891 3953	498
565	8.241 870 3290	249	8.241 891 4451	498
566	8.241 870 3041	250	8.241 891 4949	500
567	8.241 870 2791	251	8.241 891 5449	501
568	8.241 870 2540	250	8.241 891 5950	501
569	8.241 870 2290	251	8.241 891 6451	502
.570	8.241 870 2039	252	8.241 891 6953	503
571	8.241 870 1787	252	8.241 891 7456	504
572	8.241 870 1535	252	8.241 891 7960	505
573	8.241 870 1283	253	8.241 891 8465	506
574	8.241 870 1030	254	8.241 891 8971	507
575	8.241 870 0776	253	8.241 891 9478	508
576	8.241 870 0523	255	8.241 891 9986	508
577	8.241 870 0268	254	8.241 892 0494	509
578	8.241 870 0014	255	8.241 892 1003	511
579	8.241 869 9759	256	8.241 892 1514	511
.580	8.241 869 9503	256	8.241 892 2025	512
581	8.241 869 9247	256	8.241 892 2537	513
582	8.241 869 8991	257	8.241 892 3050	513
583	8.241 869 8734	258	8.241 892 3563	515
584	8.241 869 8476	257	8.241 892 4078	516
585	8.241 869 8219	259	8.241 892 4594	516
586	8.241 869 7960	258	8.241 892 5110	517
587	8.241 869 7702	259	8.241 892 5627	518
588	8.241 869 7443	260	8.241 892 6145	520
589	8.241 869 7183	260	8.241 892 6665	519
.590	8.241 869 6923	260	8.241 892 7184	521
591	8.241 869 6663	261	8.241 892 7705	522
592	8.241 869 6402	261	8.241 892 8227	523
593	8.241 869 6141	262	8.241 892 8750	523
594	8.241 869 5879	262	8.241 892 9273	524
595	8.241 869 5617	263	8.241 892 9797	526
596	8.241 869 5354	263	8.241 893 0323	526
597	8.241 869 5091	263	8.241 893 0849	527
598	8.241 869 4828	264	8.241 893 1376	528
599	8.241 869 4564	265	8.241 893 1904	528
.600	8.241 869 4299		8.241 893 2432	
	S	d	T	d

$\mathbf{0}^\circ.600 - \mathbf{0}^\circ.650$

$\mathbf{0}^\circ$	S	d	T	d
.600	8.241 869 4299	264	8.241 893 2432	530
601	8.241 869 4035	266	8.241 893 2962	531
602	8.241 869 3769	265	8.241 893 3493	531
603	8.241 869 3504	266	8.241 893 4024	532
604	8.241 869 3238	267	8.241 893 4556	533
605	8.241 869 2971	267	8.241 893 5089	534
606	8.241 869 2704	268	8.241 893 5623	535
607	8.241 869 2436	267	8.241 893 6158	536
608	8.241 869 2169	269	8.241 893 6694	537
609	8.241 869 1900	269	8.241 893 7231	537
.610	8.241 869 1631	269	8.241 893 7768	539
611	8.241 869 1362	269	8.241 893 8307	539
612	8.241 869 1093	271	8.241 893 8846	541
613	8.241 869 0822	270	8.241 893 9387	541
614	8.241 869 0552	271	8.241 893 9928	542
615	8.241 869 0281	271	8.241 894 0470	543
616	8.241 869 0010	272	8.241 894 1013	543
617	8.241 868 9738	273	8.241 894 1556	545
618	8.241 868 9465	272	8.241 894 2101	545
619	8.241 868 9193	274	8.241 894 2646	547
.620	8.241 868 8919	273	8.241 894 3193	547
621	8.241 868 8646	274	8.241 894 3740	548
622	8.241 868 8372	275	8.241 894 4288	549
623	8.241 868 8097	275	8.241 894 4837	550
624	8.241 868 7822	275	8.241 894 5387	551
625	8.241 868 7547	276	8.241 894 5938	552
626	8.241 868 7271	276	8.241 894 6490	552
627	8.241 868 6995	277	8.241 894 7042	554
628	8.241 868 6718	277	8.241 894 7596	554
629	8.241 868 6441	278	8.241 894 8150	555
.630	8.241 868 6163	278	8.241 894 8705	556
631	8.241 868 5885	278	8.241 894 9261	557
632	8.241 868 5607	279	8.241 894 9818	558
633	8.241 868 5328	280	8.241 895 0376	559
634	8.241 868 5048	279	8.241 895 0935	560
635	8.241 868 4769	281	8.241 895 1495	560
636	8.241 868 4488	280	8.241 895 2055	562
637	8.241 868 4208	281	8.241 895 2617	562
638	8.241 868 3927	282	8.241 895 3179	563
639	8.241 868 3645	282	8.241 895 3742	564
.640	8.241 868 3363	282	8.241 895 4306	565
641	8.241 868 3081	283	8.241 895 4871	566
642	8.241 868 2798	284	8.241 895 5437	567
643	8.241 868 2514	283	8.241 895 6004	567
644	8.241 868 2231	285	8.241 895 6571	569
645	8.241 868 1946	284	8.241 895 7140	569
646	8.241 868 1662	285	8.241 895 7709	570
647	8.241 868 1377	286	8.241 895 8279	571
648	8.241 868 1091	286	8.241 895 8850	572
649	8.241 868 0805	286	8.241 895 9422	573
.650	8.241 868 0519		8.241 895 9995	
	S	d	T	d

$\mathbf{0}^\circ.650 - \mathbf{0}^\circ.700$

$\mathbf{0}^\circ$	S	d	T	d
.650	8.241 868 0519	287	8.241 895 9995	574
651	8.241 868 0232	287	8.241 896 0569	574
652	8.241 867 9945	288	8.241 896 1143	576
653	8.241 867 9657	288	8.241 896 1719	576
654	8.241 867 9369	289	8.241 896 2295	578
655	8.241 867 9080	289	8.241 896 2873	578
656	8.241 867 8791	290	8.241 896 3451	579
657	8.241 867 8501	290	8.241 896 4030	580
658	8.241 867 8211	290	8.241 896 4610	581
659	8.241 867 7921	291	8.241 896 5191	581
.660	8.241 867 7630	291	8.241 896 5772	583
661	8.241 867 7339	292	8.241 896 6355	583
662	8.241 867 7047	292	8.241 896 6938	585
663	8.241 867 6755	292	8.241 896 7523	585
664	8.241 867 6463	293	8.241 896 8108	586
665	8.241 867 6170	294	8.241 896 8694	587
666	8.241 867 5876	294	8.241 896 9281	588
667	8.241 867 5582	294	8.241 896 9869	589
668	8.241 867 5288	295	8.241 897 0458	589
669	8.241 867 4993	295	8.241 897 1047	591
.670	8.241 867 4698	296	8.241 897 1638	591
671	8.241 867 4402	296	8.241 897 2229	592
672	8.241 867 4106	297	8.241 897 2821	593
673	8.241 867 3809	297	8.241 897 3414	594
674	8.241 867 3512	297	8.241 897 4008	595
675	8.241 867 3215	298	8.241 897 4603	596
676	8.241 867 2917	298	8.241 897 5199	597
677	8.241 867 2619	299	8.241 897 5796	597
678	8.241 867 2320	299	8.241 897 6393	599
679	8.241 867 2021	300	8.241 897 6992	599
.680	8.241 867 1721	300	8.241 897 7591	600
681	8.241 867 1421	301	8.241 897 8191	602
682	8.241 867 1120	300	8.241 897 8793	602
683	8.241 867 0820	302	8.241 897 9395	602
684	8.241 867 0518	302	8.241 897 9997	604
685	8.241 867 0216	302	8.241 898 0601	605
686	8.241 866 9914	303	8.241 898 1206	605
687	8.241 866 9611	303	8.241 898 1811	607
688	8.241 866 9308	304	8.241 898 2418	607
689	8.241 866 9004	304	8.241 898 3025	608
.690	8.241 866 8700	304	8.241 898 3633	609
691	8.241 866 8396	305	8.241 898 4242	610
692	8.241 866 8091	305	8.241 898 4852	611
693	8.241 866 7786	306	8.241 898 5463	611
694	8.241 866 7480	307	8.241 898 6074	613
695	8.241 866 7173	306	8.241 898 6687	613
696	8.241 866 6867	307	8.241 898 7300	615
697	8.241 866 6560	308	8.241 898 7915	615
698	8.241 866 6252	308	8.241 898 8530	616
699	8.241 866 5944	308	8.241 898 9146	617
.700	8.241 866 5636		8.241 898 9763	
	S	d	T	d

$\mathbf{0}^\circ.700 - \mathbf{0}^\circ.750$

$\mathbf{0}^\circ$	S	d	T	d
.700	8.241 866 5636	309	8.241 898 9763	618
701	8.241 866 5327	310	8.241 899 0381	619
702	8.241 866 5017	310	8.241 899 1000	619
703	8.241 866 4707	310	8.241 899 1619	621
704	8.241 866 4397	310	8.241 899 2240	621
705	8.241 866 4087	312	8.241 899 2861	622
706	8.241 866 3775	311	8.241 899 3483	624
707	8.241 866 3464	312	8.241 899 4107	624
708	8.241 866 3152	313	8.241 899 4731	625
709	8.241 866 2839	312	8.241 899 5356	625
.710	8.241 866 2527	314	8.241 899 5981	627
711	8.241 866 2213	313	8.241 899 6608	628
712	8.241 866 1900	315	8.241 899 7236	628
713	8.241 866 1585	314	8.241 899 7864	629
714	8.241 866 1271	315	8.241 899 8493	631
715	8.241 866 0956	316	8.241 899 9124	631
716	8.241 866 0640	316	8.241 899 9755	632
717	8.241 866 0324	316	8.241 900 0387	632
718	8.241 866 0008	317	8.241 900 1019	634
719	8.241 865 9691	317	8.241 900 1653	635
.720	8.241 865 9374	318	8.241 900 2288	635
721	8.241 865 9056	318	8.241 900 2923	637
722	8.241 865 8738	319	8.241 900 3560	637
723	8.241 865 8419	319	8.241 900 4197	638
724	8.241 865 8100	319	8.241 900 4835	639
725	8.241 865 7781	320	8.241 900 5474	640
726	8.241 865 7461	321	8.241 900 6114	641
727	8.241 865 7140	321	8.241 900 6755	641
728	8.241 865 6819	321	8.241 900 7396	643
729	8.241 865 6498	322	8.241 900 8039	643
.730	8.241 865 6176	322	8.241 900 8682	645
731	8.241 865 5854	322	8.241 900 9327	645
732	8.241 865 5532	323	8.241 900 9972	646
733	8.241 865 5209	324	8.241 901 0618	647
734	8.241 865 4885	324	8.241 901 1265	648
735	8.241 865 4561	324	8.241 901 1913	649
736	8.241 865 4237	325	8.241 901 2562	649
737	8.241 865 3912	325	8.241 901 3211	651
738	8.241 865 3587	326	8.241 901 3862	651
739	8.241 865 3261	326	8.241 901 4513	652
.740	8.241 865 2935	326	8.241 901 5165	653
741	8.241 865 2609	327	8.241 901 5818	655
742	8.241 865 2282	328	8.241 901 6473	654
743	8.241 865 1954	328	8.241 901 7127	656
744	8.241 865 1626	328	8.241 901 7783	657
745	8.241 865 1298	329	8.241 901 8440	657
746	8.241 865 0969	329	8.241 901 9097	659
747	8.241 865 0640	330	8.241 901 9756	659
748	8.241 865 0310	330	8.241 902 0415	660
749	8.241 864 9980	330	8.241 902 1075	661
.750	8.241 864 9650		8.241 902 1736	
	S	d	T	d

$\mathbf{0}^\circ.750 - \mathbf{0}^\circ.800$

$\mathbf{0}^\circ$	S	d	T	d
.750	8.241 864 9650	331	8.241 902 1736	662
751	8.241 864 9319	331	8.241 902 2398	663
752	8.241 864 8988	332	8.241 902 3061	664
753	8.241 864 8656	333	8.241 902 3725	665
754	8.241 864 8323	332	8.241 902 4390	665
755	8.241 864 7991	333	8.241 902 5055	666
756	8.241 864 7658	334	8.241 902 5721	668
757	8.241 864 7324	334	8.241 902 6389	668
758	8.241 864 6990	335	8.241 902 7057	669
759	8.241 864 6655	335	8.241 902 7726	670
.760	8.241 864 6320	335	8.241 902 8396	671
761	8.241 864 5985	336	8.241 902 9067	671
762	8.241 864 5649	336	8.241 902 9738	673
763	8.241 864 5313	337	8.241 903 0411	673
764	8.241 864 4976	337	8.241 903 1084	675
765	8.241 864 4639	337	8.241 903 1759	675
766	8.241 864 4302	338	8.241 903 2434	676
767	8.241 864 3964	339	8.241 903 3110	677
768	8.241 864 3625	339	8.241 903 3787	678
769	8.241 864 3286	339	8.241 903 4465	678
.770	8.241 864 2947	340	8.241 903 5143	680
771	8.241 864 2607	340	8.241 903 5823	680
772	8.241 864 2267	341	8.241 903 6503	682
773	8.241 864 1926	341	8.241 903 7185	682
774	8.241 864 1585	341	8.241 903 7867	683
775	8.241 864 1244	342	8.241 903 8550	684
776	8.241 864 0902	343	8.241 903 9234	685
777	8.241 864 0559	343	8.241 903 9919	686
778	8.241 864 0216	343	8.241 904 0605	687
779	8.241 863 9873	344	8.241 904 1292	687
.780	8.241 863 9529	344	8.241 904 1979	688
781	8.241 863 9185	345	8.241 904 2667	690
782	8.241 863 8840	345	8.241 904 3357	690
783	8.241 863 8495	345	8.241 904 4047	691
784	8.241 863 8150	346	8.241 904 4738	692
785	8.241 863 7804	346	8.241 904 5430	693
786	8.241 863 7458	347	8.241 904 6123	694
787	8.241 863 7111	348	8.241 904 6817	694
788	8.241 863 6763	347	8.241 904 7511	696
789	8.241 863 6416	348	8.241 904 8207	696
.790	8.241 863 6068	349	8.241 904 8903	697
791	8.241 863 5719	349	8.241 904 9600	698
792	8.241 863 5370	350	8.241 905 0298	699
793	8.241 863 5020	349	8.241 905 0997	700
794	8.241 863 4671	351	8.241 905 1697	701
795	8.241 863 4320	351	8.241 905 2398	702
796	8.241 863 3969	351	8.241 905 3100	702
797	8.241 863 3618	352	8.241 905 3802	704
798	8.241 863 3266	352	8.241 905 4506	704
799	8.241 863 2914	352	8.241 905 5210	705
.800	8.241 863 2562		8.241 905 5915	
	S	d	T	d

0°.800 — 0°.850

0°	S	d	T	d
.800	8.241 863 2562	353	8.241 905 5915	706
801	8.241 863 2209	354	8.241 905 6621	707
802	8.241 863 1855	354	8.241 905 7328	708
803	8.241 863 1501	354	8.241 905 8036	709
804	8.241 863 1147	355	8.241 905 8745	709
805	8.241 863 0792	355	8.241 905 9454	711
806	8.241 863 0437	356	8.241 906 0165	711
807	8.241 863 0081	356	8.241 906 0876	713
808	8.241 862 9725	356	8.241 906 1589	713
809	8.241 862 9369	357	8.241 906 2302	714
.810	8.241 862 9012	358	8.241 906 3016	715
811	8.241 862 8654	357	8.241 906 3731	715
812	8.241 862 8297	359	8.241 906 4446	717
813	8.241 862 7938	358	8.241 906 5163	718
814	8.241 862 7580	360	8.241 906 5881	718
815	8.241 862 7220	359	8.241 906 6599	719
816	8.241 862 6861	360	8.241 906 7318	720
817	8.241 862 6501	361	8.241 906 8038	721
818	8.241 862 6140	361	8.241 906 8759	722
819	8.241 862 5779	361	8.241 906 9481	723
.820	8.241 862 5418	362	8.241 907 0204	724
821	8.241 862 5056	362	8.241 907 0928	725
822	8.241 862 4694	363	8.241 907 1653	725
823	8.241 862 4331	363	8.241 907 2378	726
824	8.241 862 3968	364	8.241 907 3104	728
825	8.241 862 3604	364	8.241 907 3832	728
826	8.241 862 3240	364	8.241 907 4560	729
827	8.241 862 2876	365	8.241 907 5289	730
828	8.241 862 2511	366	8.241 907 6019	730
829	8.241 862 2145	365	8.241 907 6749	732
.830	8.241 862 1780	367	8.241 907 7481	733
831	8.241 862 1413	366	8.241 907 8214	733
832	8.241 862 1047	367	8.241 907 8947	734
833	8.241 862 0680	368	8.241 907 9681	736
834	8.241 862 0312	368	8.241 908 0417	736
835	8.241 861 9944	368	8.241 908 1153	737
836	8.241 861 9576	369	8.241 908 1890	737
837	8.241 861 9207	370	8.241 908 2627	739
838	8.241 861 8837	369	8.241 908 3366	740
839	8.241 861 8468	371	8.241 908 4106	740
.840	8.241 861 8097	370	8.241 908 4846	742
841	8.241 861 7727	371	8.241 908 5588	742
842	8.241 861 7356	372	8.241 908 6330	743
843	8.241 861 6984	372	8.241 908 7073	744
844	8.241 861 6612	372	8.241 908 7817	745
845	8.241 861 6240	373	8.241 908 8562	746
846	8.241 861 5867	373	8.241 908 9308	746
847	8.241 861 5494	374	8.241 909 0054	748
848	8.241 861 5120	374	8.241 909 0802	748
849	8.241 861 4746	375	8.241 909 1550	750
.850	8.241 861 4371		8.241 909 2300	
	S	d	T	d

0°.850 — 0°.900

0°	S	d	T	d
.850	8.241 861 4371	375	8.241 909 2300	750
851	8.241 861 3996	375	8.241 909 3050	751
852	8.241 861 3621	376	8.241 909 3801	752
853	8.241 861 3245	377	8.241 909 4553	753
854	8.241 861 2868	377	8.241 909 5306	753
855	8.241 861 2491	377	8.241 909 6059	755
856	8.241 861 2114	378	8.241 909 6814	755
857	8.241 861 1736	378	8.241 909 7569	757
858	8.241 861 1358	378	8.241 909 8326	757
859	8.241 861 0980	379	8.241 909 9083	758
.860	8.241 861 0601	380	8.241 909 9841	759
861	8.241 861 0221	380	8.241 910 0600	760
862	8.241 860 9841	380	8.241 910 1360	761
863	8.241 860 9461	381	8.241 910 2121	761
864	8.241 860 9080	381	8.241 910 2882	763
865	8.241 860 8699	382	8.241 910 3645	763
866	8.241 860 8317	382	8.241 910 4408	765
867	8.241 860 7935	382	8.241 910 5173	765
868	8.241 860 7553	383	8.241 910 5938	766
869	8.241 860 7170	384	8.241 910 6704	767
.870	8.241 860 6786	384	8.241 910 7471	768
871	8.241 860 6402	384	8.241 910 8239	768
872	8.241 860 6018	385	8.241 910 9007	770
873	8.241 860 5633	385	8.241 910 9777	770
874	8.241 860 5248	386	8.241 911 0547	772
875	8.241 860 4862	386	8.241 911 1319	772
876	8.241 860 4476	386	8.241 911 2091	773
877	8.241 860 4090	387	8.241 911 2864	774
878	8.241 860 3703	388	8.241 911 3638	775
879	8.241 860 3315	387	8.241 911 4413	776
.880	8.241 860 2928	389	8.241 911 5189	776
881	8.241 860 2539	388	8.241 911 5965	778
882	8.241 860 2151	390	8.241 911 6743	778
883	8.241 860 1761	389	8.241 911 7521	780
884	8.241 860 1372	390	8.241 911 8301	780
885	8.241 860 0982	391	8.241 911 9081	781
886	8.241 860 0591	391	8.241 911 9862	782
887	8.241 860 0200	391	8.241 912 0644	783
888	8.241 859 9809	392	8.241 912 1427	783
889	8.241 859 9417	392	8.241 912 2210	785
.890	8.241 859 9025	393	8.241 912 2995	785
891	8.241 859 8632	393	8.241 912 3780	787
892	8.241 859 8239	394	8.241 912 4567	787
893	8.241 859 7845	394	8.241 912 5354	788
894	8.241 859 7451	394	8.241 912 6142	789
895	8.241 859 7057	395	8.241 912 6931	790
896	8.241 859 6662	395	8.241 912 7721	791
897	8.241 859 6267	396	8.241 912 8512	791
898	8.241 859 5871	396	8.241 912 9303	793
899	8.241 859 5475	397	8.241 913 0096	793
.900	8.241 859 5078		8.241 913 0889	
	S	d	T	d

0°.900 — 0°.950

0°	S	d	T	d
.900	8.241 859 5078	397	8.241 913 0889	795
901	8.241 859 4681	398	8.241 913 1684	795
902	8.241 859 4283	398	8.241 913 2479	796
903	8.241 859 3885	398	8.241 913 3275	797
904	8.241 859 3487	399	8.241 913 4072	798
905	8.241 859 3088	399	8.241 913 4870	798
906	8.241 859 2689	400	8.241 913 5668	800
907	8.241 859 2289	400	8.241 913 6468	800
908	8.241 859 1889	401	8.241 913 7268	802
909	8.241 859 1488	401	8.241 913 8070	802
.910	8.241 859 1087	401	8.241 913 8872	803
911	8.241 859 0686	402	8.241 913 9675	804
912	8.241 859 0284	403	8.241 914 0479	805
913	8.241 858 9881	403	8.241 914 1284	806
914	8.241 858 9478	403	8.241 914 2090	806
915	8.241 858 9075	404	8.241 914 2896	808
916	8.241 858 8671	404	8.241 914 3704	808
917	8.241 858 8267	404	8.241 914 4512	810
918	8.241 858 7863	405	8.241 914 5322	810
919	8.241 858 7458	406	8.241 914 6132	811
.920	8.241 858 7052	406	8.241 914 6943	812
921	8.241 858 6646	406	8.241 914 7755	813
922	8.241 858 6240	407	8.241 914 8568	813
923	8.241 858 5833	407	8.241 914 9381	815
924	8.241 858 5426	408	8.241 915 0196	815
925	8.241 858 5018	408	8.241 915 1011	817
926	8.241 858 4610	409	8.241 915 1828	817
927	8.241 858 4201	409	8.241 915 2645	818
928	8.241 858 3792	409	8.241 915 3463	819
929	8.241 858 3383	410	8.241 915 4282	820
.930	8.241 858 2973	410	8.241 915 5102	821
931	8.241 858 2563	411	8.241 915 5923	821
932	8.241 858 2152	411	8.241 915 6744	823
933	8.241 858 1741	412	8.241 915 7567	823
934	8.241 858 1329	412	8.241 915 8390	825
935	8.241 858 0917	413	8.241 915 9215	825
936	8.241 858 0504	413	8.241 916 0040	826
937	8.241 858 0091	413	8.241 916 0866	827
938	8.241 857 9678	414	8.241 916 1693	828
939	8.241 857 9264	414	8.241 916 2521	828
.940	8.241 857 8850	415	8.241 916 3349	830
941	8.241 857 8435	415	8.241 916 4179	830
942	8.241 857 8020	416	8.241 916 5009	832
943	8.241 857 7604	416	8.241 916 5841	832
944	8.241 857 7188	416	8.241 916 6673	833
945	8.241 857 6772	417	8.241 916 7506	834
946	8.241 857 6355	418	8.241 916 8340	835
947	8.241 857 5937	418	8.241 916 9175	836
948	8.241 857 5519	418	8.241 917 0011	836
949	8.241 857 5101	419	8.241 917 0847	838
.950	8.241 857 4682		8.241 917 1685	
	S	d	T	d

0°.950 — 1°.000

0°	S	d	T	d
.950	8.241 857 4682	419	8.241 917 1685	838
951	8.241 857 4263	419	8.241 917 2523	840
952	8.241 857 3844	420	8.241 917 3363	840
953	8.241 857 3424	421	8.241 917 4203	841
954	8.241 857 3003	421	8.241 917 5044	842
955	8.241 857 2582	421	8.241 917 5886	843
956	8.241 857 2161	422	8.241 917 6729	843
957	8.241 857 1739	422	8.241 917 7572	845
958	8.241 857 1317	423	8.241 917 8417	845
959	8.241 857 0894	423	8.241 917 9262	847
.960	8.241 857 0471	424	8.241 918 0109	847
961	8.241 857 0047	424	8.241 918 0956	848
962	8.241 856 9623	424	8.241 918 1804	849
963	8.241 856 9199	425	8.241 918 2653	850
964	8.241 856 8774	425	8.241 918 3503	851
965	8.241 856 8349	426	8.241 918 4354	851
966	8.241 856 7923	426	8.241 918 5205	853
967	8.241 856 7497	427	8.241 918 6058	853
968	8.241 856 7070	427	8.241 918 6911	855
969	8.241 856 6643	428	8.241 918 7766	855
.970	8.241 856 6215	428	8.241 918 8621	856
971	8.241 856 5787	428	8.241 918 9477	857
972	8.241 856 5359	429	8.241 919 0334	857
973	8.241 856 4930	429	8.241 919 1191	859
974	8.241 856 4501	430	8.241 919 2050	860
975	8.241 856 4071	430	8.241 919 2910	860
976	8.241 856 3641	431	8.241 919 3770	862
977	8.241 856 3210	431	8.241 919 4632	862
978	8.241 856 2779	431	8.241 919 5494	863
979	8.241 856 2348	432	8.241 919 6357	864
.980	8.241 856 1916	433	8.241 919 7221	865
981	8.241 856 1483	432	8.241 919 8086	866
982	8.241 856 1051	434	8.241 919 8952	866
983	8.241 856 0617	433	8.241 919 9818	868
984	8.241 856 0184	435	8.241 920 0686	868
985	8.241 855 9749	434	8.241 920 1554	869
986	8.241 855 9315	435	8.241 920 2423	871
987	8.241 855 8880	436	8.241 920 3294	871
988	8.241 855 8444	436	8.241 920 4165	872
989	8.241 855 8008	436	8.241 920 5037	872
.990	8.241 855 7572	437	8.241 920 5909	874
991	8.241 855 7135	437	8.241 920 6783	875
992	8.241 855 6698	438	8.241 920 7658	875
993	8.241 855 6260	438	8.241 920 8533	877
994	8.241 855 5822	438	8.241 920 9410	877
995	8.241 855 5384	439	8.241 921 0287	878
996	8.241 855 4945	440	8.241 921 1165	879
997	8.241 855 4505	440	8.241 921 2044	880
998	8.241 855 4065	440	8.241 921 2924	880
999	8.241 855 3625	441	8.241 921 3804	882
*.000	8.241 855 3184		8.241 921 4686	
	S	d	T	d

1°.000 — 1°.050

1°	S	d	T	d
.000	8.241 855 3184	441	8.241 921 4686	883
001	8.241 855 2743	442	8.241 921 5569	883
002	8.241 855 2301	442	8.241 921 6452	884
003	8.241 855 1859	442	8.241 921 7336	886
004	8.241 855 1417	443	8.241 921 8222	886
005	8.241 855 0974	444	8.241 921 9108	887
006	8.241 855 0530	443	8.241 921 9995	887
007	8.241 855 0087	445	8.241 922 0882	889
008	8.241 854 9642	445	8.241 922 1771	890
009	8.241 854 9197	445	8.241 922 2661	890
.010	8.241 854 8752	445	8.241 922 3551	891
011	8.241 854 8307	446	8.241 922 4442	893
012	8.241 854 7861	447	8.241 922 5335	893
013	8.241 854 7414	447	8.241 922 6228	894
014	8.241 854 6967	447	8.241 922 7122	895
015	8.241 854 6520	448	8.241 922 8017	895
016	8.241 854 6072	448	8.241 922 8912	897
017	8.241 854 5624	449	8.241 922 9809	898
018	8.241 854 5175	449	8.241 923 0707	898
019	8.241 854 4726	450	8.241 923 1605	899
.020	8.241 854 4276	450	8.241 923 2504	900
021	8.241 854 3826	450	8.241 923 3404	901
022	8.241 854 3376	451	8.241 923 4305	902
023	8.241 854 2925	451	8.241 923 5207	903
024	8.241 854 2474	452	8.241 923 6110	904
025	8.241 854 2022	453	8.241 923 7014	905
026	8.241 854 1569	452	8.241 923 7919	905
027	8.241 854 1117	453	8.241 923 8824	906
028	8.241 854 0664	454	8.241 923 9730	908
029	8.241 854 0210	454	8.241 924 0638	908
.030	8.241 853 9756	454	8.241 924 1546	909
031	8.241 853 9302	455	8.241 924 2455	910
032	8.241 853 8847	455	8.241 924 3365	910
033	8.241 853 8392	456	8.241 924 4275	912
034	8.241 853 7936	456	8.241 924 5187	912
035	8.241 853 7480	457	8.241 924 6099	914
036	8.241 853 7023	457	8.241 924 7013	914
037	8.241 853 6566	458	8.241 924 7927	915
038	8.241 853 6108	458	8.241 924 8842	916
039	8.241 853 5650	458	8.241 924 9758	917
.040	8.241 853 5192	459	8.241 925 0675	918
041	8.241 853 4733	459	8.241 925 1593	919
042	8.241 853 4274	460	8.241 925 2512	919
043	8.241 853 3814	460	8.241 925 3431	921
044	8.241 853 3354	461	8.241 925 4352	921
045	8.241 853 2893	461	8.241 925 5273	922
046	8.241 853 2432	461	8.241 925 6195	924
047	8.241 853 1971	462	8.241 925 7119	924
048	8.241 853 1509	463	8.241 925 8043	924
049	8.241 853 1046	462	8.241 925 8967	926
.050	8.241 853 0584		8.241 925 9893	
	S	d	T	d

1°.050 — 1°.100

1°	S	d	T	d
.050	8.241 853 0584	464	8.241 925 9893	927
051	8.241 853 0120	463	8.241 926 0820	927
052	8.241 852 9657	465	8.241 926 1747	929
053	8.241 852 9192	464	8.241 926 2676	929
054	8.241 852 8728	465	8.241 926 3605	930
055	8.241 852 8263	466	8.241 926 4535	931
056	8.241 852 7797	465	8.241 926 5466	932
057	8.241 852 7332	467	8.241 926 6398	933
058	8.241 852 6865	467	8.241 926 7331	934
059	8.241 852 6398	467	8.241 926 8265	934
.060	8.241 852 5931	468	8.241 926 9199	936
061	8.241 852 5463	468	8.241 927 0135	936
062	8.241 852 4995	468	8.241 927 1071	937
063	8.241 852 4527	469	8.241 927 2008	939
064	8.241 852 4058	470	8.241 927 2947	939
065	8.241 852 3588	469	8.241 927 3886	939
066	8.241 852 3119	471	8.241 927 4825	941
067	8.241 852 2648	471	8.241 927 5766	942
068	8.241 852 2177	471	8.241 927 6708	942
069	8.241 852 1706	471	8.241 927 7650	944
.070	8.241 852 1235	472	8.241 927 8594	944
071	8.241 852 0763	473	8.241 927 9538	945
072	8.241 852 0290	473	8.241 928 0483	946
073	8.241 851 9817	473	8.241 928 1429	947
074	8.241 851 9344	474	8.241 928 2376	948
075	8.241 851 8870	474	8.241 928 3324	949
076	8.241 851 8396	475	8.241 928 4273	949
077	8.241 851 7921	475	8.241 928 5222	951
078	8.241 851 7446	476	8.241 928 6173	951
079	8.241 851 6970	476	8.241 928 7124	952
.080	8.241 851 6494	477	8.241 928 8076	953
081	8.241 851 6017	476	8.241 928 9029	954
082	8.241 851 5541	478	8.241 928 9983	955
083	8.241 851 5063	478	8.241 929 0938	956
084	8.241 851 4585	478	8.241 929 1894	957
085	8.241 851 4107	479	8.241 929 2851	957
086	8.241 851 3628	479	8.241 929 3808	959
087	8.241 851 3149	479	8.241 929 4767	959
088	8.241 851 2670	480	8.241 929 5726	960
089	8.241 851 2190	481	8.241 929 6686	961
.090	8.241 851 1709	481	8.241 929 7647	962
091	8.241 851 1228	481	8.241 929 8609	963
092	8.241 851 0747	482	8.241 929 9572	964
093	8.241 851 0265	482	8.241 930 0536	964
094	8.241 850 9783	483	8.241 930 1500	966
095	8.241 850 9300	483	8.241 930 2466	966
096	8.241 850 8817	483	8.241 930 3432	967
097	8.241 850 8334	484	8.241 930 4399	968
098	8.241 850 7850	485	8.241 930 5367	969
099	8.241 850 7365	485	8.241 930 6336	970
.100	8.241 850 6880		8.241 930 7306	
	S	d	T	d

1°.100 — 1°.150

1°	S	d	T	d
.100	8.241 850 6880	485	8.241 930 7306	971
101	8.241 850 6395	486	8.241 930 8277	972
102	8.241 850 5909	486	8.241 930 9249	972
103	8.241 850 5423	486	8.241 931 0221	974
104	8.241 850 4937	488	8.241 931 1195	974
105	8.241 850 4449	487	8.241 931 2169	975
106	8.241 850 3962	488	8.241 931 3144	976
107	8.241 850 3474	488	8.241 931 4120	977
108	8.241 850 2986	489	8.241 931 5097	978
109	8.241 850 2497	490	8.241 931 6075	979
.110	8.241 850 2007	489	8.241 931 7054	979
111	8.241 850 1518	490	8.241 931 8033	981
112	8.241 850 1028	491	8.241 931 9014	981
113	8.241 850 0537	491	8.241 931 9995	982
114	8.241 850 0046	492	8.241 932 0977	983
115	8.241 849 9554	491	8.241 932 1960	984
116	8.241 849 9063	493	8.241 932 2944	985
117	8.241 849 8570	493	8.241 932 3929	986
118	8.241 849 8077	493	8.241 932 4915	987
119	8.241 849 7584	494	8.241 932 5902	987
.120	8.241 849 7090	494	8.241 932 6889	989
121	8.241 849 6596	494	8.241 932 7878	989
122	8.241 849 6102	495	8.241 932 8867	990
123	8.241 849 5607	496	8.241 932 9857	991
124	8.241 849 5111	496	8.241 933 0848	992
125	8.241 849 4615	496	8.241 933 1840	993
126	8.241 849 4119	497	8.241 933 2833	994
127	8.241 849 3622	497	8.241 933 3827	994
128	8.241 849 3125	498	8.241 933 4821	996
129	8.241 849 2627	498	8.241 933 5817	996
.130	8.241 849 2129	498	8.241 933 6813	997
131	8.241 849 1631	499	8.241 933 7810	998
132	8.241 849 1132	500	8.241 933 8808	999
133	8.241 849 0632	500	8.241 933 9807	1 000
134	8.241 849 0132	500	8.241 934 0807	1 001
135	8.241 848 9632	501	8.241 934 1808	1 002
136	8.241 848 9131	501	8.241 934 2810	1 002
137	8.241 848 8630	501	8.241 934 3812	1 004
138	8.241 848 8129	502	8.241 934 4816	1 004
139	8.241 848 7627	503	8.241 934 5820	1 005
.140	8.241 848 7124	503	8.241 934 6825	1 006
141	8.241 848 6621	503	8.241 934 7831	1 007
142	8.241 848 6118	504	8.241 934 8838	1 008
143	8.241 848 5614	504	8.241 934 9846	1 009
144	8.241 848 5110	505	8.241 935 0855	1 009
145	8.241 848 4605	505	8.241 935 1864	1 011
146	8.241 848 4100	506	8.241 935 2875	1 011
147	8.241 848 3594	506	8.241 935 3886	1 012
148	8.241 848 3088	506	8.241 935 4898	1 013
149	8.241 848 2582	507	8.241 935 5911	1 014
.150	8.241 848 2075		8.241 935 6925	
	S	d	T	d

1°.150 — 1°.200

1°	S	d	T	d
.150	8.241 848 2075	508	8.241 935 6925	1 015
151	8.241 848 1567	507	8.241 935 7940	1 016
152	8.241 848 1060	509	8.241 935 8956	1 017
153	8.241 848 0551	508	8.241 935 9973	1 017
154	8.241 848 0043	510	8.241 936 0990	1 019
155	8.241 847 9533	509	8.241 936 2009	1 019
156	8.241 847 9024	510	8.241 936 3028	1 020
157	8.241 847 8514	511	8.241 936 4048	1 021
158	8.241 847 8003	510	8.241 936 5069	1 022
159	8.241 847 7493	512	8.241 936 6091	1 023
.160	8.241 847 6981	512	8.241 936 7114	1 024
161	8.241 847 6469	512	8.241 936 8138	1 024
162	8.241 847 5957	512	8.241 936 9162	1 026
163	8.241 847 5445	513	8.241 937 0188	1 026
164	8.241 847 4932	514	8.241 937 1214	1 027
165	8.241 847 4418	514	8.241 937 2241	1 028
166	8.241 847 3904	514	8.241 937 3269	1 029
167	8.241 847 3390	515	8.241 937 4298	1 030
168	8.241 847 2875	516	8.241 937 5328	1 031
169	8.241 847 2359	515	8.241 937 6359	1 032
.170	8.241 847 1844	516	8.241 937 7391	1 032
171	8.241 847 1328	517	8.241 937 8423	1 034
172	8.241 847 0811	517	8.241 937 9457	1 034
173	8.241 847 0294	518	8.241 938 0491	1 035
174	8.241 846 9776	518	8.241 938 1526	1 036
175	8.241 846 9258	518	8.241 938 2562	1 037
176	8.241 846 8740	519	8.241 938 3599	1 038
177	8.241 846 8221	519	8.241 938 4637	1 039
178	8.241 846 7702	520	8.241 938 5676	1 039
179	8.241 846 7182	520	8.241 938 6715	1 041
.180	8.241 846 6662	521	8.241 938 7756	1 041
181	8.241 846 6141	521	8.241 938 8797	1 042
182	8.241 846 5620	521	8.241 938 9839	1 043
183	8.241 846 5099	522	8.241 939 0882	1 044
184	8.241 846 4577	522	8.241 939 1926	1 045
185	8.241 846 4055	523	8.241 939 2971	1 046
186	8.241 846 3532	523	8.241 939 4017	1 047
187	8.241 846 3009	524	8.241 939 5064	1 047
188	8.241 846 2485	524	8.241 939 6111	1 049
189	8.241 846 1961	525	8.241 939 7160	1 049
.190	8.241 846 1436	525	8.241 939 8209	1 050
191	8.241 846 0911	525	8.241 939 9259	1 051
192	8.241 846 0386	526	8.241 940 0310	1 052
193	8.241 845 9860	526	8.241 940 1362	1 053
194	8.241 845 9334	527	8.241 940 2415	1 054
195	8.241 845 8807	527	8.241 940 3469	1 054
196	8.241 845 8280	528	8.241 940 4523	1 056
197	8.241 845 7752	528	8.241 940 5579	1 056
198	8.241 845 7224	529	8.241 940 6635	1 057
199	8.241 845 6695	529	8.241 940 7692	1 059
.200	8.241 845 6166		8.241 940 8751	
	S	d	T	d

1°.200 — 1°.250

1°	S	d	T	d
.200	8.241 845 6166	529	8.241 940 8751	1 059
201	8.241 845 5637	530	8.241 940 9810	1 059
202	8.241 845 5107	530	8.241 941 0869	1 061
203	8.241 845 4577	531	8.241 941 1930	1 062
204	8.241 845 4046	531	8.241 941 2992	1 062
205	8.241 845 3515	532	8.241 941 4054	1 064
206	8.241 845 2983	532	8.241 941 5118	1 064
207	8.241 845 2451	532	8.241 941 6182	1 065
208	8.241 845 1919	533	8.241 941 7247	1 066
209	8.241 845 1386	533	8.241 941 8313	1 067
.210	8.241 845 0853	534	8.241 941 9380	1 068
211	8.241 845 0319	535	8.241 942 0448	1 069
212	8.241 844 9784	534	8.241 942 1517	1 069
213	8.241 844 9250	535	8.241 942 2586	1 071
214	8.241 844 8715	536	8.241 942 3657	1 071
215	8.241 844 8179	536	8.241 942 4728	1 073
216	8.241 844 7643	536	8.241 942 5801	1 073
217	8.241 844 7107	537	8.241 942 6874	1 074
218	8.241 844 6570	538	8.241 942 7948	1 075
219	8.241 844 6032	538	8.241 942 9023	1 075
.220	8.241 844 5494	538	8.241 943 0098	1 077
221	8.241 844 4956	538	8.241 943 1175	1 078
222	8.241 844 4418	540	8.241 943 2253	1 078
223	8.241 844 3878	539	8.241 943 3331	1 079
224	8.241 844 3339	540	8.241 943 4410	1 080
225	8.241 844 2799	541	8.241 943 5490	1 082
226	8.241 844 2258	540	8.241 943 6572	1 081
227	8.241 844 1718	542	8.241 943 7653	1 083
228	8.241 844 1176	541	8.241 943 8736	1 084
229	8.241 844 0635	543	8.241 943 9820	1 085
.230	8.241 844 0092	542	8.241 944 0905	1 085
231	8.241 843 9550	543	8.241 944 1990	1 086
232	8.241 843 9007	544	8.241 944 3076	1 088
233	8.241 843 8463	544	8.241 944 4164	1 088
234	8.241 843 7919	544	8.241 944 5252	1 089
235	8.241 843 7375	545	8.241 944 6341	1 090
236	8.241 843 6830	545	8.241 944 7431	1 091
237	8.241 843 6285	546	8.241 944 8522	1 091
238	8.241 843 5739	546	8.241 944 9613	1 093
239	8.241 843 5193	547	8.241 945 0706	1 093
.240	8.241 843 4646	547	8.241 945 1799	1 094
241	8.241 843 4099	547	8.241 945 2893	1 096
242	8.241 843 3552	548	8.241 945 3989	1 096
243	8.241 843 3004	549	8.241 945 5085	1 097
244	8.241 843 2455	549	8.241 945 6182	1 098
245	8.241 843 1906	549	8.241 945 7280	1 098
246	8.241 843 1357	550	8.241 945 8378	1 100
247	8.241 843 0807	550	8.241 945 9478	1 100
248	8.241 843 0257	550	8.241 946 0578	1 102
249	8.241 842 9707	551	8.241 946 1680	1 102
.250	8.241 842 9156		8.241 946 2782	
	S	d	T	d

1°.250 — 1°.300

1°	S	d	T	d
.250	8.241 842 9156	552	8.241 946 2782	1 103
251	8.241 842 8604	552	8.241 946 3885	1 104
252	8.241 842 8052	552	8.241 946 4989	1 105
253	8.241 842 7500	553	8.241 946 6094	1 106
254	8.241 842 6947	553	8.241 946 7200	1 106
255	8.241 842 6394	554	8.241 946 8306	1 108
256	8.241 842 5840	554	8.241 946 9414	1 108
257	8.241 842 5286	554	8.241 947 0522	1 110
258	8.241 842 4732	555	8.241 947 1632	1 110
259	8.241 842 4177	556	8.241 947 2742	1 111
.260	8.241 842 3621	556	8.241 947 3853	1 112
261	8.241 842 3065	556	8.241 947 4965	1 113
262	8.241 842 2509	557	8.241 947 6078	1 114
263	8.241 842 1952	557	8.241 947 7192	1 114
264	8.241 842 1395	558	8.241 947 8306	1 116
265	8.241 842 0837	558	8.241 947 9422	1 116
266	8.241 842 0279	558	8.241 948 0538	1 117
267	8.241 841 9721	559	8.241 948 1655	1 118
268	8.241 841 9162	559	8.241 948 2773	1 119
269	8.241 841 8603	560	8.241 948 3892	1 120
.270	8.241 841 8043	561	8.241 948 5012	1 121
271	8.241 841 7482	560	8.241 948 6133	1 122
272	8.241 841 6922	562	8.241 948 7255	1 122
273	8.241 841 6360	561	8.241 948 8377	1 124
274	8.241 841 5799	562	8.241 948 9501	1 124
275	8.241 841 5237	563	8.241 949 0625	1 125
276	8.241 841 4674	563	8.241 949 1750	1 126
277	8.241 841 4111	563	8.241 949 2876	1 127
278	8.241 841 3548	564	8.241 949 4003	1 128
279	8.241 841 2984	564	8.241 949 5131	1 129
.280	8.241 841 2420	565	8.241 949 6260	1 129
281	8.241 841 1855	565	8.241 949 7389	1 131
282	8.241 841 1290	565	8.241 949 8520	1 131
283	8.241 841 0725	566	8.241 949 9651	1 133
284	8.241 841 0159	567	8.241 950 0784	1 133
285	8.241 840 9592	567	8.241 950 1917	1 134
286	8.241 840 9025	567	8.241 950 3051	1 135
287	8.241 840 8458	568	8.241 950 4186	1 135
288	8.241 840 7890	568	8.241 950 5321	1 137
289	8.241 840 7322	569	8.241 950 6458	1 138
.290	8.241 840 6753	569	8.241 950 7596	1 138
291	8.241 840 6184	569	8.241 950 8734	1 139
292	8.241 840 5615	570	8.241 950 9873	1 141
293	8.241 840 5045	571	8.241 951 1014	1 141
294	8.241 840 4474	571	8.241 951 2155	1 142
295	8.241 840 3903	571	8.241 951 3297	1 143
296	8.241 840 3332	572	8.241 951 4440	1 143
297	8.241 840 2760	572	8.241 951 5583	1 145
298	8.241 840 2188	573	8.241 951 6728	1 145
299	8.241 840 1615	573	8.241 951 7873	1 147
.300	8.241 840 1042		8.241 951 9020	
	S	d	T	d

1°.300 — 1°.350

1°	S	d	T	d
.300	8.241 840 1042	573	8.241 951 9020	1 147
301	8.241 840 0469	574	8.241 952 0167	1 148
302	8.241 839 9895	575	8.241 952 1315	1 149
303	8.241 839 9320	574	8.241 952 2464	1 150
304	8.241 839 8746	576	8.241 952 3614	1 151
305	8.241 839 8170	575	8.241 952 4765	1 152
306	8.241 839 7595	576	8.241 952 5917	1 152
307	8.241 839 7019	577	8.241 952 7069	1 154
308	8.241 839 6442	577	8.241 952 8223	1 154
309	8.241 839 5865	578	8.241 952 9377	1 155
.310	8.241 839 5287	578	8.241 953 0532	1 156
311	8.241 839 4709	578	8.241 953 1688	1 157
312	8.241 839 4131	579	8.241 953 2845	1 158
313	8.241 839 3552	579	8.241 953 4003	1 159
314	8.241 839 2973	580	8.241 953 5162	1 159
315	8.241 839 2393	580	8.241 953 6321	1 161
316	8.241 839 1813	580	8.241 953 7482	1 161
317	8.241 839 1233	581	8.241 953 8643	1 163
318	8.241 839 0652	582	8.241 953 9806	1 163
319	8.241 839 0070	582	8.241 954 0969	1 164
.320	8.241 838 9488	582	8.241 954 2133	1 165
321	8.241 838 8906	583	8.241 954 3298	1 165
322	8.241 838 8323	583	8.241 954 4463	1 167
323	8.241 838 7740	584	8.241 954 5630	1 168
324	8.241 838 7156	584	8.241 954 6798	1 168
325	8.241 838 6572	584	8.241 954 7966	1 169
326	8.241 838 5988	585	8.241 954 9135	1 171
327	8.241 838 5403	586	8.241 955 0306	1 171
328	8.241 838 4817	586	8.241 955 1477	1 172
329	8.241 838 4231	586	8.241 955 2649	1 173
.330	8.241 838 3645	587	8.241 955 3822	1 173
331	8.241 838 3058	587	8.241 955 4995	1 175
332	8.241 838 2471	587	8.241 955 6170	1 175
333	8.241 838 1884	588	8.241 955 7345	1 177
334	8.241 838 1296	589	8.241 955 8522	1 177
335	8.241 838 0707	589	8.241 955 9699	1 178
336	8.241 838 0118	589	8.241 956 0877	1 179
337	8.241 837 9529	590	8.241 956 2056	1 180
338	8.241 837 8939	590	8.241 956 3236	1 181
339	8.241 837 8349	591	8.241 956 4417	1 182
.340	8.241 837 7758	591	8.241 956 5599	1 182
341	8.241 837 7167	592	8.241 956 6781	1 184
342	8.241 837 6575	592	8.241 956 7965	1 184
343	8.241 837 5983	592	8.241 956 9149	1 185
344	8.241 837 5391	593	8.241 957 0334	1 186
345	8.241 837 4798	594	8.241 957 1520	1 187
346	8.241 837 4204	593	8.241 957 2707	1 188
347	8.241 837 3611	595	8.241 957 3895	1 189
348	8.241 837 3016	594	8.241 957 5084	1 190
349	8.241 837 2422	596	8.241 957 6274	1 190
.350	8.241 837 1826		8.241 957 7464	
	S	d	T	d

1°.350 — 1°.400

1°	S	d	T	d
.350	8.241 837 1826	595	8.241 957 7464	1 191
351	8.241 837 1231	596	8.241 957 8655	1 193
352	8.241 837 0635	597	8.241 957 9848	1 193
353	8.241 837 0038	596	8.241 958 1041	1 194
354	8.241 836 9442	598	8.241 958 2235	1 195
355	8.241 836 8844	598	8.241 958 3430	1 196
356	8.241 836 8246	598	8.241 958 4626	1 196
357	8.241 836 7648	598	8.241 958 5822	1 198
358	8.241 836 7050	599	8.241 958 7020	1 198
359	8.241 836 6451	600	8.241 958 8218	1 200
.360	8.241 836 5851	600	8.241 958 9418	1 200
361	8.241 836 5251	600	8.241 959 0618	1 201
362	8.241 836 4651	601	8.241 959 1819	1 202
363	8.241 836 4050	602	8.241 959 3021	1 203
364	8.241 836 3448	601	8.241 959 4224	1 204
365	8.241 836 2847	602	8.241 959 5428	1 204
366	8.241 836 2245	603	8.241 959 6632	1 206
367	8.241 836 1642	603	8.241 959 7838	1 206
368	8.241 836 1039	604	8.241 959 9044	1 207
369	8.241 836 0435	604	8.241 960 0251	1 209
.370	8.241 835 9831	604	8.241 960 1460	1 209
371	8.241 835 9227	605	8.241 960 2669	1 210
372	8.241 835 8622	605	8.241 960 3879	1 210
373	8.241 835 8017	606	8.241 960 5089	1 212
374	8.241 835 7411	606	8.241 960 6301	1 213
375	8.241 835 6805	607	8.241 960 7514	1 213
376	8.241 835 6198	607	8.241 960 8727	1 214
377	8.241 835 5591	607	8.241 960 9941	1 216
378	8.241 835 4984	608	8.241 961 1157	1 216
379	8.241 835 4376	608	8.241 961 2373	1 217
.380	8.241 835 3768	609	8.241 961 3590	1 218
381	8.241 835 3159	609	8.241 961 4808	1 218
382	8.241 835 2550	610	8.241 961 6026	1 220
383	8.241 835 1940	610	8.241 961 7246	1 221
384	8.241 835 1330	611	8.241 961 8467	1 221
385	8.241 835 0719	611	8.241 961 9688	1 222
386	8.241 835 0108	611	8.241 962 0910	1 223
387	8.241 834 9497	612	8.241 962 2133	1 224
388	8.241 834 8885	612	8.241 962 3357	1 225
389	8.241 834 8273	613	8.241 962 4582	1 226
.390	8.241 834 7660	613	8.241 962 5808	1 227
391	8.241 834 7047	614	8.241 962 7035	1 228
392	8.241 834 6433	614	8.241 962 8263	1 228
393	8.241 834 5819	615	8.241 962 9491	1 229
394	8.241 834 5204	615	8.241 963 0720	1 231
395	8.241 834 4589	615	8.241 963 1951	1 231
396	8.241 834 3974	616	8.241 963 3182	1 232
397	8.241 834 3358	616	8.241 963 4414	1 233
398	8.241 834 2742	617	8.241 963 5647	1 233
399	8.241 834 2125	617	8.241 963 6880	1 235
.400	8.241 834 1508		8.241 963 8115	
	S	d	T	d

1°.400 — 1°.450

1°	S	d	T	d
.400	8.241 834 1508	618	8.241 963 8115	1 235
401	8.241 834 0890	618	8.241 963 9350	1 237
402	8.241 834 0272	618	8.241 964 0587	1 237
403	8.241 833 9654	619	8.241 964 1824	1 238
404	8.241 833 9035	619	8.241 964 3062	1 239
405	8.241 833 8416	620	8.241 964 4301	1 240
406	8.241 833 7796	621	8.241 964 5541	1 241
407	8.241 833 7175	620	8.241 964 6782	1 242
408	8.241 833 6555	621	8.241 964 8024	1 242
409	8.241 833 5934	622	8.241 964 9266	1 244
.410	8.241 833 5312	622	8.241 965 0510	1 244
411	8.241 833 4690	622	8.241 965 1754	1 246
412	8.241 833 4068	623	8.241 965 3000	1 246
413	8.241 833 3445	624	8.241 965 4246	1 247
414	8.241 833 2821	624	8.241 965 5493	1 248
415	8.241 833 2197	624	8.241 965 6741	1 248
416	8.241 833 1573	624	8.241 965 7989	1 250
417	8.241 833 0949	626	8.241 965 9239	1 250
418	8.241 833 0323	625	8.241 966 0489	1 252
419	8.241 832 9698	626	8.241 966 1741	1 252
.420	8.241 832 9072	627	8.241 966 2993	1 253
421	8.241 832 8445	626	8.241 966 4246	1 254
422	8.241 832 7819	628	8.241 966 5500	1 255
423	8.241 832 7191	627	8.241 966 6755	1 256
424	8.241 832 6564	629	8.241 966 8011	1 257
425	8.241 832 5935	628	8.241 966 9268	1 258
426	8.241 832 5307	629	8.241 967 0526	1 258
427	8.241 832 4678	630	8.241 967 1784	1 259
428	8.241 832 4048	630	8.241 967 3043	1 261
429	8.241 832 3418	630	8.241 967 4304	1 261
.430	8.241 832 2788	631	8.241 967 5565	1 262
431	8.241 832 2157	631	8.241 967 6827	1 263
432	8.241 832 1526	632	8.241 967 8090	1 263
433	8.241 832 0894	632	8.241 967 9353	1 265
434	8.241 832 0262	633	8.241 968 0618	1 266
435	8.241 831 9629	633	8.241 968 1884	1 266
436	8.241 831 8996	633	8.241 968 3150	1 267
437	8.241 831 8363	634	8.241 968 4417	1 268
438	8.241 831 7729	635	8.241 968 5685	1 270
439	8.241 831 7094	635	8.241 968 6955	1 270
.440	8.241 831 6459	635	8.241 968 8225	1 270
441	8.241 831 5824	636	8.241 968 9495	1 272
442	8.241 831 5188	636	8.241 969 0767	1 273
443	8.241 831 4552	636	8.241 969 2040	1 273
444	8.241 831 3916	637	8.241 969 3313	1 275
445	8.241 831 3279	638	8.241 969 4588	1 275
446	8.241 831 2641	638	8.241 969 5863	1 276
447	8.241 831 2003	638	8.241 969 7139	1 277
448	8.241 831 1365	639	8.241 969 8416	1 278
449	8.241 831 0726	639	8.241 969 9694	1 279
.450	8.241 831 0087		8.241 970 0973	
	S	d	T	d

1°.450 — 1°.500

1°	S	d	T	d
.450	8.241 831 0087	640	8.241 970 0973	1 279
451	8.241 830 9447	640	8.241 970 2252	1 281
452	8.241 830 8807	640	8.241 970 3533	1 281
453	8.241 830 8167	641	8.241 970 4814	1 283
454	8.241 830 7526	642	8.241 970 6097	1 283
455	8.241 830 6884	642	8.241 970 7380	1 284
456	8.241 830 6242	642	8.241 970 8664	1 285
457	8.241 830 5600	643	8.241 970 9949	1 286
458	8.241 830 4957	643	8.241 971 1235	1 286
459	8.241 830 4314	644	8.241 971 2521	1 288
.460	8.241 830 3670	644	8.241 971 3809	1 288
461	8.241 830 3026	644	8.241 971 5097	1 290
462	8.241 830 2382	645	8.241 971 6387	1 290
463	8.241 830 1737	646	8.241 971 7677	1 291
464	8.241 830 1091	645	8.241 971 8968	1 292
465	8.241 830 0446	647	8.241 972 0260	1 293
466	8.241 829 9799	646	8.241 972 1553	1 294
467	8.241 829 9153	648	8.241 972 2847	1 295
468	8.241 829 8505	647	8.241 972 4142	1 295
469	8.241 829 7858	648	8.241 972 5437	1 297
.470	8.241 829 7210	649	8.241 972 6734	1 297
471	8.241 829 6561	649	8.241 972 8031	1 298
472	8.241 829 5912	649	8.241 972 9329	1 299
473	8.241 829 5263	650	8.241 973 0628	1 300
474	8.241 829 4613	650	8.241 973 1928	1 301
475	8.241 829 3963	651	8.241 973 3229	1 302
476	8.241 829 3312	651	8.241 973 4531	1 302
477	8.241 829 2661	651	8.241 973 5833	1 304
478	8.241 829 2010	652	8.241 973 7137	1 304
479	8.241 829 1358	653	8.241 973 8441	1 305
.480	8.241 829 0705	653	8.241 973 9746	1 307
481	8.241 829 0052	653	8.241 974 1053	1 307
482	8.241 828 9399	654	8.241 974 2360	1 308
483	8.241 828 8745	654	8.241 974 3668	1 308
484	8.241 828 8091	655	8.241 974 4976	1 310
485	8.241 828 7436	655	8.241 974 6286	1 311
486	8.241 828 6781	655	8.241 974 7597	1 311
487	8.241 828 6126	656	8.241 974 8908	1 312
488	8.241 828 5470	657	8.241 975 0220	1 314
489	8.241 828 4813	657	8.241 975 1534	1 314
.490	8.241 828 4156	657	8.241 975 2848	1 315
491	8.241 828 3499	658	8.241 975 4163	1 315
492	8.241 828 2841	658	8.241 975 5478	1 317
493	8.241 828 2183	659	8.241 975 6795	1 318
494	8.241 828 1524	659	8.241 975 8113	1 318
495	8.241 828 0865	659	8.241 975 9431	1 320
496	8.241 828 0206	660	8.241 976 0751	1 320
497	8.241 827 9546	661	8.241 976 2071	1 321
498	8.241 827 8885	660	8.241 976 3392	1 322
499	8.241 827 8225	662	8.241 976 4714	1 323
.500	8.241 827 7563		8.241 976 6037	
	S	d	T	d

1°.500 — 1°.550

1°	S	d	T	d
.500	8.241 827 7563	661	8.241 976 6037	1 324
501	8.241 827 6902	663	8.241 976 7361	1 325
502	8.241 827 6239	662	8.241 976 8686	1 325
503	8.241 827 5577	663	8.241 977 0011	1 327
504	8.241 827 4914	664	8.241 977 1338	1 327
505	8.241 827 4250	664	8.241 977 2665	1 328
506	8.241 827 3586	664	8.241 977 3993	1 329
507	8.241 827 2922	665	8.241 977 5322	1 330
508	8.241 827 2257	665	8.241 977 6652	1 331
509	8.241 827 1592	666	8.241 977 7983	1 332
.510	8.241 827 0926	666	8.241 977 9315	1 332
511	8.241 827 0260	666	8.241 978 0647	1 334
512	8.241 826 9594	667	8.241 978 1981	1 334
513	8.241 826 8927	668	8.241 978 3315	1 336
514	8.241 826 8259	668	8.241 978 4651	1 336
515	8.241 826 7591	668	8.241 978 5987	1 337
516	8.241 826 6923	669	8.241 978 7324	1 338
517	8.241 826 6254	669	8.241 978 8662	1 339
518	8.241 826 5585	670	8.241 979 0001	1 339
519	8.241 826 4915	670	8.241 979 1340	1 341
.520	8.241 826 4245	670	8.241 979 2681	1 341
521	8.241 826 3575	671	8.241 979 4022	1 343
522	8.241 826 2904	672	8.241 979 5365	1 343
523	8.241 826 2232	672	8.241 979 6708	1 344
524	8.241 826 1560	672	8.241 979 8052	1 345
525	8.241 826 0888	673	8.241 979 9397	1 346
526	8.241 826 0215	673	8.241 980 0743	1 347
527	8.241 825 9542	674	8.241 980 2090	1 347
528	8.241 825 8868	674	8.241 980 3437	1 349
529	8.241 825 8194	674	8.241 980 4786	1 349
.530	8.241 825 7520	675	8.241 980 6135	1 350
531	8.241 825 6845	675	8.241 980 7485	1 352
532	8.241 825 6170	676	8.241 980 8837	1 352
533	8.241 825 5494	677	8.241 981 0189	1 353
534	8.241 825 4817	676	8.241 981 1542	1 353
535	8.241 825 4141	677	8.241 981 2895	1 355
536	8.241 825 3464	678	8.241 981 4250	1 356
537	8.241 825 2786	678	8.241 981 5606	1 356
538	8.241 825 2108	679	8.241 981 6962	1 358
539	8.241 825 1429	678	8.241 981 8320	1 358
.540	8.241 825 0751	680	8.241 981 9678	1 359
541	8.241 825 0071	680	8.241 982 1037	1 360
542	8.241 824 9391	680	8.241 982 2397	1 361
543	8.241 824 8711	681	8.241 982 3758	1 362
544	8.241 824 8030	681	8.241 982 5120	1 362
545	8.241 824 7349	681	8.241 982 6482	1 364
546	8.241 824 6668	682	8.241 982 7846	1 364
547	8.241 824 5986	683	8.241 982 9210	1 365
548	8.241 824 5303	683	8.241 983 0575	1 367
549	8.241 824 4620	683	8.241 983 1942	1 367
.550	8.241 824 3937		8.241 983 3309	
	S	d	T	d

1°.550 — 1°.600

1°	S	d	T	d
.550	8.241 824 3937	684	8.241 983 3309	1 368
551	8.241 824 3253	684	8.241 983 4677	1 368
552	8.241 824 2569	685	8.241 983 6045	1 370
553	8.241 824 1884	685	8.241 983 7415	1 371
554	8.241 824 1199	685	8.241 983 8786	1 371
555	8.241 824 0514	686	8.241 984 0157	1 373
556	8.241 823 9828	687	8.241 984 1530	1 373
557	8.241 823 9141	686	8.241 984 2903	1 374
558	8.241 823 8455	688	8.241 984 4277	1 375
559	8.241 823 7767	687	8.241 984 5652	1 376
.560	8.241 823 7080	689	8.241 984 7028	1 377
561	8.241 823 6391	688	8.241 984 8405	1 377
562	8.241 823 5703	689	8.241 984 9782	1 379
563	8.241 823 5014	690	8.241 985 1161	1 379
564	8.241 823 4324	690	8.241 985 2540	1 380
565	8.241 823 3634	690	8.241 985 3920	1 382
566	8.241 823 2944	691	8.241 985 5302	1 382
567	8.241 823 2253	691	8.241 985 6684	1 383
568	8.241 823 1562	692	8.241 985 8067	1 384
569	8.241 823 0870	692	8.241 985 9451	1 384
.570	8.241 823 0178	693	8.241 986 0835	1 386
571	8.241 822 9485	693	8.241 986 2221	1 386
572	8.241 822 8792	693	8.241 986 3607	1 388
573	8.241 822 8099	694	8.241 986 4995	1 388
574	8.241 822 7405	694	8.241 986 6383	1 389
575	8.241 822 6711	695	8.241 986 7772	1 390
576	8.241 822 6016	696	8.241 986 9162	1 391
577	8.241 822 5320	695	8.241 987 0553	1 392
578	8.241 822 4625	696	8.241 987 1945	1 392
579	8.241 822 3929	697	8.241 987 3337	1 394
.580	8.241 822 3232	697	8.241 987 4731	1 394
581	8.241 822 2535	697	8.241 987 6125	1 396
582	8.241 822 1838	698	8.241 987 7521	1 396
583	8.241 822 1140	699	8.241 987 8917	1 397
584	8.241 822 0441	698	8.241 988 0314	1 398
585	8.241 821 9743	700	8.241 988 1712	1 399
586	8.241 821 9043	699	8.241 988 3111	1 400
587	8.241 821 8344	700	8.241 988 4511	1 400
588	8.241 821 7644	701	8.241 988 5911	1 402
589	8.241 821 6943	701	8.241 988 7313	1 402
.590	8.241 821 6242	701	8.241 988 8715	1 403
591	8.241 821 5541	702	8.241 989 0118	1 404
592	8.241 821 4839	702	8.241 989 1522	1 405
593	8.241 821 4137	703	8.241 989 2927	1 406
594	8.241 821 3434	703	8.241 989 4333	1 407
595	8.241 821 2731	704	8.241 989 5740	1 408
596	8.241 821 2027	704	8.241 989 7148	1 408
597	8.241 821 1323	704	8.241 989 8556	1 410
598	8.241 821 0619	705	8.241 989 9966	1 410
599	8.241 820 9914	706	8.241 990 1376	1 411
.600	8.241 820 9208		8.241 990 2787	
	S	d	T	d

1°.600 — 1°.650 **1°.650 — 1°.700**

1°	S	d	T	d	1°	S	d	T	d
.600	8.241 820 9208	706	8.241 990 2787	1 412	.650	8.241 817 3377	728	8.241 997 4473	1 457
601	8.241 820 8502	706	8.241 990 4199	1 413	651	8.241 817 2649	728	8.241 997 5930	1 457
602	8.241 820 7796	707	8.241 990 5612	1 414	652	8.241 817 1921	729	8.241 997 7387	1 458
603	8.241 820 7089	707	8.241 990 7026	1 415	653	8.241 817 1192	729	8.241 997 8845	1 459
604	8.241 820 6382	707	8.241 990 8441	1 416	654	8.241 817 0463	730	8.241 998 0304	1 459
605	8.241 820 5675	708	8.241 990 9857	1 416	655	8.241 816 9733	730	8.241 998 1763	1 461
606	8.241 820 4967	709	8.241 991 1273	1 417	656	8.241 816 9003	731	8.241 998 3224	1 461
607	8.241 820 4258	709	8.241 991 2690	1 419	657	8.241 816 8272	731	8.241 998 4685	1 463
608	8.241 820 3549	709	8.241 991 4109	1 419	658	8.241 816 7541	731	8.241 998 6148	1 463
609	8.241 820 2840	710	8.241 991 5528	1 420	659	8.241 816 6810	732	8.241 998 7611	1 464
.610	8.241 820 2130	710	8.241 991 6948	1 421	.660	8.241 816 6078	732	8.241 998 9075	1 465
611	8.241 820 1420	711	8.241 991 8369	1 422	661	8.241 816 5346	733	8.241 999 0540	1 466
612	8.241 820 0709	711	8.241 991 9791	1 422	662	8.241 816 4613	733	8.241 999 2006	1 467
613	8.241 819 9998	711	8.241 992 1213	1 424	663	8.241 816 3880	734	8.241 999 3473	1 468
614	8.241 819 9287	712	8.241 992 2637	1 424	664	8.241 816 3146	734	8.241 999 4941	1 469
615	8.241 819 8575	713	8.241 992 4061	1 426	665	8.241 816 2412	734	8.241 999 6410	1 469
616	8.241 819 7862	713	8.241 992 5487	1 426	666	8.241 816 1678	735	8.241 999 7879	1 470
617	8.241 819 7149	713	8.241 992 6913	1 427	667	8.241 816 0943	735	8.241 999 9349	1 472
618	8.241 819 6436	714	8.241 992 8340	1 428	668	8.241 816 0208	736	8.242 000 0821	1 472
619	8.241 819 5722	714	8.241 992 9768	1 429	669	8.241 815 9472	737	8.242 000 2293	1 473
.620	8.241 819 5008	715	8.241 993 1197	1 430	.670	8.241 815 8735	736	8.242 000 3766	1 474
621	8.241 819 4293	715	8.241 993 2627	1 430	671	8.241 815 7999	737	8.242 000 5240	1 474
622	8.241 819 3578	715	8.241 993 4057	1 432	672	8.241 815 7262	738	8.242 000 6714	1 476
623	8.241 819 2863	716	8.241 993 5489	1 432	673	8.241 815 6524	738	8.242 000 8190	1 477
624	8.241 819 2147	717	8.241 993 6921	1 433	674	8.241 815 5786	738	8.242 000 9667	1 477
625	8.241 819 1430	716	8.241 993 8354	1 435	675	8.241 815 5048	739	8.242 001 1144	1 478
626	8.241 819 0714	718	8.241 993 9789	1 435	676	8.241 815 4309	740	8.242 001 2622	1 480
627	8.241 818 9996	718	8.241 994 1224	1 436	677	8.241 815 3569	739	8.242 001 4102	1 480
628	8.241 818 9278	718	8.241 994 2660	1 436	678	8.241 815 2830	741	8.242 001 5582	1 481
629	8.241 818 8560	718	8.241 994 4096	1 438	679	8.241 815 2089	740	8.242 001 7063	1 481
.630	8.241 818 7842	719	8.241 994 5534	1 439	.680	8.241 815 1349	741	8.242 001 8544	1 483
631	8.241 818 7123	720	8.241 994 6973	1 439	681	8.241 815 0608	742	8.242 002 0027	1 484
632	8.241 818 6403	720	8.241 994 8412	1 440	682	8.241 814 9866	742	8.242 002 1511	1 484
633	8.241 818 5683	720	8.241 994 9852	1 442	683	8.241 814 9124	742	8.242 002 2995	1 486
634	8.241 818 4963	721	8.241 995 1294	1 442	684	8.241 814 8382	743	8.242 002 4481	1 486
635	8.241 818 4242	721	8.241 995 2736	1 443	685	8.241 814 7639	744	8.242 002 5967	1 487
636	8.241 818 3521	722	8.241 995 4179	1 444	686	8.241 814 6895	743	8.242 002 7454	1 488
637	8.241 818 2799	722	8.241 995 5623	1 444	687	8.241 814 6152	745	8.242 002 8942	1 489
638	8.241 818 2077	723	8.241 995 7067	1 446	688	8.241 814 5407	744	8.242 003 0431	1 490
639	8.241 818 1354	723	8.241 995 8513	1 446	689	8.241 814 4663	745	8.242 003 1921	1 490
.640	8.241 818 0631	723	8.241 995 9959	1 448	.690	8.241 814 3918	746	8.242 003 3411	1 492
641	8.241 817 9908	724	8.241 996 1407	1 448	691	8.241 814 3172	746	8.242 003 4903	1 492
642	8.241 817 9184	724	8.241 996 2855	1 449	692	8.241 814 2426	746	8.242 003 6395	1 494
643	8.241 817 8460	725	8.241 996 4304	1 450	693	8.241 814 1680	747	8.242 003 7889	1 494
644	8.241 817 7735	725	8.241 996 5754	1 451	694	8.241 814 0933	747	8.242 003 9383	1 495
645	8.241 817 7010	726	8.241 996 7205	1 452	695	8.241 814 0186	748	8.242 004 0878	1 496
646	8.241 817 6284	726	8.241 996 8657	1 453	696	8.241 813 9438	748	8.242 004 2374	1 497
647	8.241 817 5558	727	8.241 997 0110	1 453	697	8.241 813 8690	749	8.242 004 3871	1 498
648	8.241 817 4831	727	8.241 997 1563	1 455	698	8.241 813 7941	749	8.242 004 5369	1 498
649	8.241 817 4104	727	8.241 997 3018	1 455	699	8.241 813 7192	749	8.242 004 6867	1 500
.650	8.241 817 3377		8.241 997 4473		.700	8.241 813 6443		8.242 004 8367	
	S	d	T	d		S	d	T	d

1°.700 — 1°.750

1°	S	d	T	d
.700	8.241 813 6443	750	8.242 004 8367	1 500
701	8.241 813 5693	751	8.242 004 9867	1 501
702	8.241 813 4942	750	8.242 005 1368	1 503
703	8.241 813 4192	752	8.242 005 2871	1 503
704	8.241 813 3440	751	8.242 005 4374	1 503
705	8.241 813 2689	752	8.242 005 5877	1 505
706	8.241 813 1937	753	8.242 005 7382	1 506
707	8.241 813 1184	753	8.242 005 8888	1 507
708	8.241 813 0431	754	8.242 006 0395	1 507
709	8.241 812 9677	753	8.242 006 1902	1 508
.710	8.241 812 8924	755	8.242 006 3410	1 510
711	8.241 812 8169	755	8.242 006 4920	1 510
712	8.241 812 7414	755	8.242 006 6430	1 511
713	8.241 812 6659	755	8.242 006 7941	1 511
714	8.241 812 5904	757	8.242 006 9452	1 513
715	8.241 812 5147	756	8.242 007 0965	1 514
716	8.241 812 4391	757	8.242 007 2479	1 514
717	8.241 812 3634	757	8.242 007 3993	1 516
718	8.241 812 2877	758	8.242 007 5509	1 516
719	8.241 812 2119	759	8.242 007 7025	1 517
.720	8.241 812 1360	758	8.242 007 8542	1 518
721	8.241 812 0602	760	8.242 008 0060	1 519
722	8.241 811 9842	759	8.242 008 1579	1 520
723	8.241 811 9083	760	8.242 008 3099	1 521
724	8.241 811 8323	761	8.242 008 4620	1 521
725	8.241 811 7562	761	8.242 008 6141	1 523
726	8.241 811 6801	761	8.242 008 7664	1 523
727	8.241 811 6040	762	8.242 008 9187	1 524
728	8.241 811 5278	762	8.242 009 0711	1 525
729	8.241 811 4516	763	8.242 009 2236	1 526
.730	8.241 811 3753	763	8.242 009 3762	1 527
731	8.241 811 2990	764	8.242 009 5289	1 528
732	8.241 811 2226	764	8.242 009 6817	1 529
733	8.241 811 1462	764	8.242 009 8346	1 529
734	8.241 811 0698	765	8.242 009 9875	1 531
735	8.241 810 9933	766	8.242 010 1406	1 531
736	8.241 810 9167	765	8.242 010 2937	1 532
737	8.241 810 8402	767	8.242 010 4469	1 533
738	8.241 810 7635	766	8.242 010 6002	1 534
739	8.241 810 6869	767	8.242 010 7536	1 535
.740	8.241 810 6102	768	8.242 010 9071	1 536
741	8.241 810 5334	768	8.242 011 0607	1 536
742	8.241 810 4566	768	8.242 011 2143	1 538
743	8.241 810 3798	769	8.242 011 3681	1 538
744	8.241 810 3029	770	8.242 011 5219	1 539
745	8.241 810 2259	769	8.242 011 6758	1 540
746	8.241 810 1490	771	8.242 011 8298	1 541
747	8.241 810 0719	770	8.242 011 9839	1 542
748	8.241 809 9949	771	8.242 012 1381	1 543
749	8.241 809 9178	772	8.242 012 2924	1 544
.750	8.241 809 8406		8.242 012 4468	
	S	d	T	d

1°.750 — 1°.800

1°	S	d	T	d
.750	8.241 809 8406	772	8.242 012 4468	1 544
751	8.241 809 7634	772	8.242 012 6012	1 546
752	8.241 809 6862	773	8.242 012 7558	1 546
753	8.241 809 6089	774	8.242 012 9104	1 547
754	8.241 809 5315	773	8.242 013 0651	1 548
755	8.241 809 4542	775	8.242 013 2199	1 549
756	8.241 809 3767	774	8.242 013 3748	1 550
757	8.241 809 2993	775	8.242 013 5298	1 551
758	8.241 809 2218	776	8.242 013 6849	1 551
759	8.241 809 1442	776	8.242 013 8400	1 553
.760	8.241 809 0666	776	8.242 013 9953	1 553
761	8.241 808 9890	777	8.242 014 1506	1 555
762	8.241 808 9113	777	8.242 014 3061	1 555
763	8.241 808 8336	778	8.242 014 4616	1 556
764	8.241 808 7558	778	8.242 014 6172	1 557
765	8.241 808 6780	779	8.242 014 7729	1 557
766	8.241 808 6001	779	8.242 014 9286	1 559
767	8.241 808 5222	779	8.242 015 0845	1 560
768	8.241 808 4443	780	8.242 015 2405	1 560
769	8.241 808 3663	780	8.242 015 3965	1 561
.770	8.241 808 2883	781	8.242 015 5526	1 563
771	8.241 808 2102	781	8.242 015 7089	1 563
772	8.241 808 1321	782	8.242 015 8652	1 564
773	8.241 808 0539	782	8.242 016 0216	1 564
774	8.241 807 9757	783	8.242 016 1780	1 566
775	8.241 807 8974	783	8.242 016 3346	1 567
776	8.241 807 8191	783	8.242 016 4913	1 567
777	8.241 807 7408	784	8.242 016 6480	1 569
778	8.241 807 6624	785	8.242 016 8049	1 569
779	8.241 807 5839	784	8.242 016 9618	1 570
.780	8.241 807 5055	786	8.242 017 1188	1 571
781	8.241 807 4269	785	8.242 017 2759	1 572
782	8.241 807 3484	786	8.242 017 4331	1 573
783	8.241 807 2698	787	8.242 017 5904	1 574
784	8.241 807 1911	787	8.242 017 7478	1 574
785	8.241 807 1124	787	8.242 017 9052	1 576
786	8.241 807 0337	788	8.242 018 0628	1 576
787	8.241 806 9549	788	8.242 018 2204	1 577
788	8.241 806 8761	789	8.242 018 3781	1 578
789	8.241 806 7972	789	8.242 018 5359	1 579
.790	8.241 806 7183	790	8.242 018 6938	1 580
791	8.241 806 6393	790	8.242 018 8518	1 581
792	8.241 806 5603	790	8.242 019 0099	1 581
793	8.241 806 4813	791	8.242 019 1680	1 583
794	8.241 806 4022	792	8.242 019 3263	1 583
795	8.241 806 3230	792	8.242 019 4846	1 585
796	8.241 806 2438	792	8.242 019 6431	1 585
797	8.241 806 1646	793	8.242 019 8016	1 586
798	8.241 806 0853	793	8.242 019 9602	1 587
799	8.241 806 0060	793	8.242 020 1189	1 588
.800	8.241 805 9267		8.242 020 2777	
	S	d	T	d

1°.800 — 1°.850

1°	S	d	T	d
.800	8.241 805 9267	794	8.242 020 2777	1 588
801	8.241 805 8473	795	8.242 020 4365	1 590
802	8.241 805 7678	795	8.242 020 5955	1 590
803	8.241 805 6883	795	8.242 020 7545	1 592
804	8.241 805 6088	796	8.242 020 9137	1 592
805	8.241 805 5292	796	8.242 021 0729	1 593
806	8.241 805 4496	797	8.242 021 2322	1 594
807	8.241 805 3699	797	8.242 021 3916	1 595
808	8.241 805 2902	798	8.242 021 5511	1 596
809	8.241 805 2104	798	8.242 021 7107	1 596
.810	8.241 805 1306	798	8.242 021 8703	1 598
811	8.241 805 0508	799	8.242 022 0301	1 598
812	8.241 804 9709	799	8.242 022 1899	1 600
813	8.241 804 8910	800	8.242 022 3499	1 600
814	8.241 804 8110	800	8.242 022 5099	1 601
815	8.241 804 7310	801	8.242 022 6700	1 602
816	8.241 804 6509	801	8.242 022 8302	1 603
817	8.241 804 5708	801	8.242 022 9905	1 603
818	8.241 804 4907	802	8.242 023 1508	1 605
819	8.241 804 4105	803	8.242 023 3113	1 605
.820	8.241 804 3302	803	8.242 023 4718	1 607
821	8.241 804 2499	803	8.242 023 6325	1 607
822	8.241 804 1696	804	8.242 023 7932	1 608
823	8.241 804 0892	804	8.242 023 9540	1 609
824	8.241 804 0088	805	8.242 024 1149	1 610
825	8.241 803 9283	805	8.242 024 2759	1 611
826	8.241 803 8478	805	8.242 024 4370	1 611
827	8.241 803 7673	806	8.242 024 5981	1 613
828	8.241 803 6867	806	8.242 024 7594	1 613
829	8.241 803 6061	807	8.242 024 9207	1 615
.830	8.241 803 5254	808	8.242 025 0822	1 615
831	8.241 803 4446	807	8.242 025 2437	1 616
832	8.241 803 3639	808	8.242 025 4053	1 617
833	8.241 803 2831	809	8.242 025 5670	1 618
834	8.241 803 2022	809	8.242 025 7288	1 619
835	8.241 803 1213	810	8.242 025 8907	1 619
836	8.241 803 0403	809	8.242 026 0526	1 621
837	8.241 802 9594	811	8.242 026 2147	1 621
838	8.241 802 8783	811	8.242 026 3768	1 622
839	8.241 802 7972	811	8.242 026 5390	1 623
.840	8.241 802 7161	811	8.242 026 7013	1 624
841	8.241 802 6350	813	8.242 026 8637	1 625
842	8.241 802 5537	812	8.242 027 0262	1 626
843	8.241 802 4725	813	8.242 027 1888	1 627
844	8.241 802 3912	814	8.242 027 3515	1 627
845	8.241 802 3098	813	8.242 027 5142	1 629
846	8.241 802 2285	815	8.242 027 6771	1 629
847	8.241 802 1470	815	8.242 027 8400	1 630
848	8.241 802 0655	815	8.242 028 0030	1 631
849	8.241 801 9840	815	8.242 028 1661	1 632
.850	8.241 801 9025		8.242 028 3293	
	S	d	T	d

1°.850 — 1°.900

1°	S	d	T	d
.850	8.241 801 9025	817	8.242 028 3293	1 633
851	8.241 801 8208	816	8.242 028 4926	1 634
852	8.241 801 7392	817	8.242 028 6560	1 635
853	8.241 801 6575	817	8.242 028 8195	1 635
854	8.241 801 5758	818	8.242 028 9830	1 637
855	8.241 801 4940	819	8.242 029 1467	1 637
856	8.241 801 4121	818	8.242 029 3104	1 638
857	8.241 801 3303	819	8.242 029 4742	1 639
858	8.241 801 2484	820	8.242 029 6381	1 640
859	8.241 801 1664	820	8.242 029 8021	1 641
.860	8.241 801 0844	821	8.242 029 9662	1 641
861	8.241 801 0023	821	8.242 030 1303	1 643
862	8.241 800 9202	821	8.242 030 2946	1 643
863	8.241 800 8381	822	8.242 030 4589	1 645
864	8.241 800 7559	822	8.242 030 6234	1 645
865	8.241 800 6737	823	8.242 030 7879	1 646
866	8.241 800 5914	823	8.242 030 9525	1 647
867	8.241 800 5091	824	8.242 031 1172	1 648
868	8.241 800 4267	824	8.242 031 2820	1 649
869	8.241 800 3443	824	8.242 031 4469	1 649
.870	8.241 800 2619	825	8.242 031 6118	1 651
871	8.241 800 1794	825	8.242 031 7769	1 651
872	8.241 800 0969	826	8.242 031 9420	1 653
873	8.241 800 0143	826	8.242 032 1073	1 653
874	8.241 799 9317	827	8.242 032 2726	1 654
875	8.241 799 8490	827	8.242 032 4380	1 655
876	8.241 799 7663	828	8.242 032 6035	1 656
877	8.241 799 6835	828	8.242 032 7691	1 656
878	8.241 799 6007	828	8.242 032 9347	1 658
879	8.241 799 5179	829	8.242 033 1005	1 658
.880	8.241 799 4350	829	8.242 033 2663	1 660
881	8.241 799 3521	830	8.242 033 4323	1 660
882	8.241 799 2691	830	8.242 033 5983	1 661
883	8.241 799 1861	831	8.242 033 7644	1 662
884	8.241 799 1030	831	8.242 033 9306	1 663
885	8.241 799 0199	831	8.242 034 0969	1 664
886	8.241 798 9368	832	8.242 034 2633	1 664
887	8.241 798 8536	833	8.242 034 4297	1 666
888	8.241 798 7703	833	8.242 034 5963	1 666
889	8.241 798 6870	833	8.242 034 7629	1 668
.890	8.241 798 6037	834	8.242 034 9297	1 668
891	8.241 798 5203	834	8.242 035 0965	1 669
892	8.241 798 4369	835	8.242 035 2634	1 670
893	8.241 798 3534	835	8.242 035 4304	1 671
894	8.241 798 2699	835	8.242 035 5975	1 671
895	8.241 798 1864	836	8.242 035 7646	1 673
896	8.241 798 1028	836	8.242 035 9319	1 674
897	8.241 798 0192	837	8.242 036 0993	1 674
898	8.241 797 9355	837	8.242 036 2667	1 675
899	8.241 797 8518	838	8.242 036 4342	1 676
.900	8.241 797 7680		8.242 036 6018	
	S	d	T	d

1°.900 — 1°.950

1°	S	d	T	d
.900	8.241 797 7680	838	8.242 036 6018	1 677
901	8.241 797 6842	839	8.242 036 7695	1 678
902	8.241 797 6003	839	8.242 036 9373	1 679
903	8.241 797 5164	839	8.242 037 1052	1 680
904	8.241 797 4325	840	8.242 037 2732	1 680
905	8.241 797 3485	841	8.242 037 4412	1 682
906	8.241 797 2644	840	8.242 037 6094	1 682
907	8.241 797 1804	842	8.242 037 7776	1 683
908	8.241 797 0962	841	8.242 037 9459	1 684
909	8.241 797 0121	842	8.242 038 1143	1 685
.910	8.241 796 9279	843	8.242 038 2828	1 686
911	8.241 796 8436	843	8.242 038 4514	1 687
912	8.241 796 7593	843	8.242 038 6201	1 687
913	8.241 796 6750	844	8.242 038 7888	1 689
914	8.241 796 5906	845	8.242 038 9577	1 689
915	8.241 796 5061	844	8.242 039 1266	1 691
916	8.241 796 4217	846	8.242 039 2957	1 691
917	8.241 796 3371	845	8.242 039 4648	1 692
918	8.241 796 2526	846	8.242 039 6340	1 693
919	8.241 796 1680	847	8.242 039 8033	1 694
.920	8.241 796 0833	847	8.242 039 9727	1 694
921	8.241 795 9986	847	8.242 040 1421	1 696
922	8.241 795 9139	848	8.242 040 3117	1 696
923	8.241 795 8291	848	8.242 040 4813	1 698
924	8.241 795 7443	849	8.242 040 6511	1 698
925	8.241 795 6594	849	8.242 040 8209	1 699
926	8.241 795 5745	850	8.242 040 9908	1 700
927	8.241 795 4895	850	8.242 041 1608	1 701
928	8.241 795 4045	850	8.242 041 3309	1 702
929	8.241 795 3195	851	8.242 041 5011	1 702
.930	8.241 795 2344	852	8.242 041 6713	1 704
931	8.241 795 1492	851	8.242 041 8417	1 704
932	8.241 795 0641	853	8.242 042 0121	1 705
933	8.241 794 9788	852	8.242 042 1826	1 707
934	8.241 794 8936	854	8.242 042 3533	1 707
935	8.241 794 8082	853	8.242 042 5240	1 708
936	8.241 794 7229	854	8.242 042 6948	1 708
937	8.241 794 6375	855	8.242 042 8656	1 710
938	8.241 794 5520	855	8.242 043 0366	1 711
939	8.241 794 4665	855	8.242 043 2077	1 711
.940	8.241 794 3810	856	8.242 043 3788	1 712
941	8.241 794 2954	856	8.242 043 5500	1 714
942	8.241 794 2098	857	8.242 043 7214	1 714
943	8.241 794 1241	857	8.242 043 8928	1 715
944	8.241 794 0384	857	8.242 044 0643	1 716
945	8.241 793 9527	858	8.242 044 2359	1 717
946	8.241 793 8669	859	8.242 044 4076	1 717
947	8.241 793 7810	858	8.242 044 5793	1 719
948	8.241 793 6952	860	8.242 044 7512	1 719
949	8.241 793 6092	860	8.242 044 9231	1 720
.950	8.241 793 5232		8.242 045 0951	
	S	d	T	d

1°.950 — 2°.000

1°	S	d	T	d
.950	8.241 793 5232	860	8.242 045 0951	1 722
951	8.241 793 4372	860	8.242 045 2673	1 722
952	8.241 793 3512	861	8.242 045 4395	1 723
953	8.241 793 2651	862	8.242 045 6118	1 724
954	8.241 793 1789	862	8.242 045 7842	1 724
955	8.241 793 0927	862	8.242 045 9566	1 726
956	8.241 793 0065	863	8.242 046 1292	1 726
957	8.241 792 9202	863	8.242 046 3018	1 728
958	8.241 792 8339	864	8.242 046 4746	1 728
959	8.241 792 7475	864	8.242 046 6474	1 729
.960	8.241 792 6611	865	8.242 046 8203	1 730
961	8.241 792 5746	865	8.242 046 9933	1 731
962	8.241 792 4881	866	8.242 047 1664	1 732
963	8.241 792 4015	865	8.242 047 3396	1 732
964	8.241 792 3150	867	8.242 047 5128	1 734
965	8.241 792 2283	867	8.242 047 6862	1 734
966	8.241 792 1416	867	8.242 047 8596	1 736
967	8.241 792 0549	868	8.242 048 0332	1 736
968	8.241 791 9681	868	8.242 048 2068	1 737
969	8.241 791 8813	868	8.242 048 3805	1 738
.970	8.241 791 7945	869	8.242 048 5543	1 739
971	8.241 791 7076	870	8.242 048 7282	1 740
972	8.241 791 6206	870	8.242 048 9022	1 740
973	8.241 791 5336	870	8.242 049 0762	1 742
974	8.241 791 4466	871	8.242 049 2504	1 742
975	8.241 791 3595	871	8.242 049 4246	1 743
976	8.241 791 2724	872	8.242 049 5989	1 745
977	8.241 791 1852	872	8.242 049 7734	1 745
978	8.241 791 0980	872	8.242 049 9479	1 746
979	8.241 791 0108	873	8.242 050 1225	1 746
.980	8.241 790 9235	874	8.242 050 2971	1 748
981	8.241 790 8361	874	8.242 050 4719	1 749
982	8.241 790 7487	874	8.242 050 6468	1 749
983	8.241 790 6613	875	8.242 050 8217	1 750
984	8.241 790 5738	875	8.242 050 9967	1 752
985	8.241 790 4863	875	8.242 051 1719	1 752
986	8.241 790 3988	877	8.242 051 3471	1 753
987	8.241 790 3111	876	8.242 051 5224	1 754
988	8.241 790 2235	877	8.242 051 6978	1 754
989	8.241 790 1358	877	8.242 051 8732	1 756
.990	8.241 790 0481	878	8.242 052 0488	1 757
991	8.241 789 9603	879	8.242 052 2245	1 757
992	8.241 789 8724	878	8.242 052 4002	1 758
993	8.241 789 7846	879	8.242 052 5760	1 759
994	8.241 789 6967	880	8.242 052 7519	1 761
995	8.241 789 6087	880	8.242 052 9280	1 760
996	8.241 789 5207	881	8.242 053 1040	1 762
997	8.241 789 4326	881	8.242 053 2802	1 763
998	8.241 789 3445	881	8.242 053 4565	1 764
999	8.241 789 2564	882	8.242 053 6329	1 764
*.000	8.241 789 1682		8.242 053 8093	
	S	d	T	d

2°.000 — 2°.050

2°	S	d	T	d
.000	8.241 789 1682	882	8.242 053 8093	1 765
001	8.241 789 0800	883	8.242 053 9858	1 767
002	8.241 788 9917	883	8.242 054 1625	1 767
003	8.241 788 9034	883	8.242 054 3392	1 768
004	8.241 788 8151	884	8.242 054 5160	1 769
005	8.241 788 7267	885	8.242 054 6929	1 770
006	8.241 788 6382	885	8.242 054 8699	1 770
007	8.241 788 5497	885	8.242 055 0469	1 772
008	8.241 788 4612	886	8.242 055 2241	1 772
009	8.241 788 3726	886	8.242 055 4013	1 773
.010	8.241 788 2840	887	8.242 055 5786	1 775
011	8.241 788 1953	887	8.242 055 7561	1 775
012	8.241 788 1066	887	8.242 055 9336	1 776
013	8.241 788 0179	888	8.242 056 1112	1 777
014	8.241 787 9291	889	8.242 056 2889	1 777
015	8.241 787 8402	889	8.242 056 4666	1 779
016	8.241 787 7513	889	8.242 056 6445	1 779
017	8.241 787 6624	890	8.242 056 8224	1 781
018	8.241 787 5734	890	8.242 057 0005	1 781
019	8.241 787 4844	890	8.242 057 1786	1 782
.020	8.241 787 3954	892	8.242 057 3568	1 783
021	8.241 787 3062	891	8.242 057 5351	1 784
022	8.241 787 2171	892	8.242 057 7135	1 785
023	8.241 787 1279	892	8.242 057 8920	1 786
024	8.241 787 0387	893	8.242 058 0706	1 786
025	8.241 786 9494	894	8.242 058 2492	1 788
026	8.241 786 8600	893	8.242 058 4280	1 788
027	8.241 786 7707	894	8.242 058 6068	1 789
028	8.241 786 6813	895	8.242 058 7857	1 790
029	8.241 786 5918	895	8.242 058 9647	1 791
.030	8.241 786 5023	896	8.242 059 1438	1 792
031	8.241 786 4127	895	8.242 059 3230	1 793
032	8.241 786 3232	897	8.242 059 5023	1 793
033	8.241 786 2335	897	8.242 059 6816	1 795
034	8.241 786 1438	897	8.242 059 8611	1 795
035	8.241 786 0541	898	8.242 060 0406	1 797
036	8.241 785 9643	898	8.242 060 2203	1 797
037	8.241 785 8745	898	8.242 060 4000	1 798
038	8.241 785 7847	899	8.242 060 5798	1 799
039	8.241 785 6948	900	8.242 060 7597	1 800
.040	8.241 785 6048	900	8.242 060 9397	1 800
041	8.241 785 5148	900	8.242 061 1197	1 802
042	8.241 785 4248	901	8.242 061 2999	1 802
043	8.241 785 3347	901	8.242 061 4801	1 804
044	8.241 785 2446	902	8.242 061 6605	1 804
045	8.241 785 1544	902	8.242 061 8409	1 805
046	8.241 785 0642	902	8.242 062 0214	1 806
047	8.241 784 9740	903	8.242 062 2020	1 807
048	8.241 784 8837	904	8.242 062 3827	1 808
049	8.241 784 7933	904	8.242 062 5635	1 808
.050	8.241 784 7029		8.242 062 7443	
	S	d	T	d

2°.050 — 2°.100

2°	S	d	T	d
.050	8.241 784 7029	904	8.242 062 7443	1 810
051	8.241 784 6125	905	8.242 062 9253	1 810
052	8.241 784 5220	905	8.242 063 1063	1 812
053	8.241 784 4315	905	8.242 063 2875	1 812
054	8.241 784 3410	906	8.242 063 4687	1 813
055	8.241 784 2504	907	8.242 063 6500	1 814
056	8.241 784 1597	907	8.242 063 8314	1 815
057	8.241 784 0690	907	8.242 064 0129	1 815
058	8.241 783 9783	908	8.242 064 1944	1 817
059	8.241 783 8875	908	8.242 064 3761	1 818
.060	8.241 783 7967	909	8.242 064 5579	1 818
061	8.241 783 7058	909	8.242 064 7397	1 819
062	8.241 783 6149	910	8.242 064 9216	1 820
063	8.241 783 5239	910	8.242 065 1036	1 821
064	8.241 783 4329	910	8.242 065 2857	1 822
065	8.241 783 3419	911	8.242 065 4679	1 823
066	8.241 783 2508	912	8.242 065 6502	1 824
067	8.241 783 1596	911	8.242 065 8326	1 824
068	8.241 783 0685	913	8.242 066 0150	1 826
069	8.241 782 9772	912	8.242 066 1976	1 826
.070	8.241 782 8860	914	8.242 066 3802	1 827
071	8.241 782 7946	913	8.242 066 5629	1 828
072	8.241 782 7033	914	8.242 066 7457	1 829
073	8.241 782 6119	915	8.242 066 9286	1 830
074	8.241 782 5204	914	8.242 067 1116	1 831
075	8.241 782 4290	916	8.242 067 2947	1 832
076	8.241 782 3374	916	8.242 067 4779	1 832
077	8.241 782 2458	916	8.242 067 6611	1 833
078	8.241 782 1542	916	8.242 067 8444	1 835
079	8.241 782 0626	918	8.242 068 0279	1 835
.080	8.241 781 9708	917	8.242 068 2114	1 836
081	8.241 781 8791	918	8.242 068 3950	1 837
082	8.241 781 7873	918	8.242 068 5787	1 838
083	8.241 781 6955	919	8.242 068 7625	1 838
084	8.241 781 6036	920	8.242 068 9463	1 840
085	8.241 781 5116	919	8.242 069 1303	1 840
086	8.241 781 4197	921	8.242 069 3143	1 842
087	8.241 781 3276	920	8.242 069 4985	1 842
088	8.241 781 2356	921	8.242 069 6827	1 843
089	8.241 781 1435	922	8.242 069 8670	1 844
.090	8.241 781 0513	922	8.242 070 0514	1 845
091	8.241 780 9591	922	8.242 070 2359	1 846
092	8.241 780 8669	923	8.242 070 4205	1 846
093	8.241 780 7746	923	8.242 070 6051	1 848
094	8.241 780 6823	924	8.242 070 7899	1 848
095	8.241 780 5899	924	8.242 070 9747	1 850
096	8.241 780 4975	925	8.242 071 1597	1 850
097	8.241 780 4050	925	8.242 071 3447	1 851
098	8.241 780 3125	925	8.242 071 5298	1 852
099	8.241 780 2200	926	8.242 071 7150	1 853
.100	8.241 780 1274		8.242 071 9003	
	S	d	T	d